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JANUARY 1958

51st Year
Vol. 51
No. 1

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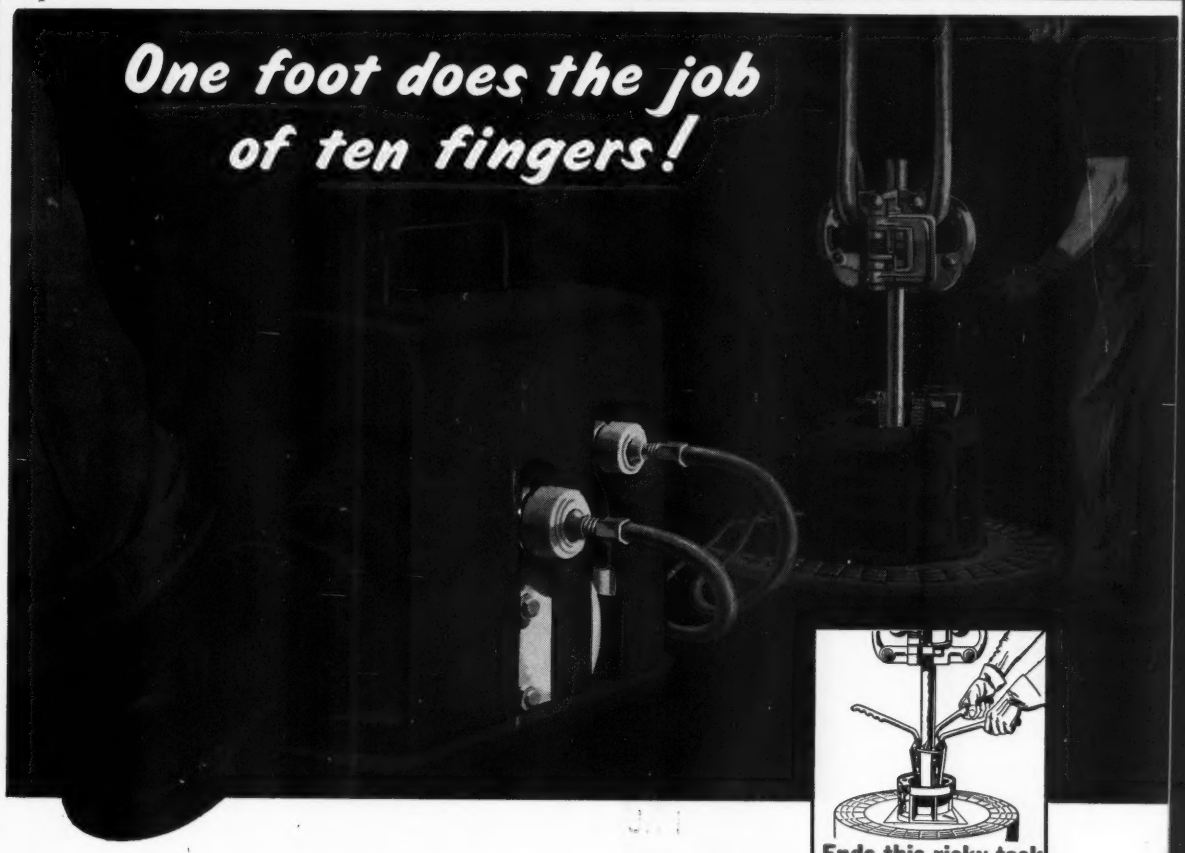

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CALIFORNIA
OIL WORLD

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Telephone DUnkirk 2-6218
January 15th, 1958

Crude Oil and Natural Gas Bring U. S. Mineral Production to Record Value

Attesting once again to the preeminence of petroleum, oil and gas can be held to account for bringing mineral output in the United States to a record value of $18,300,000,000 in 1957, compared to a 1956 value of $17,500,000,000.

Interior Secretary Fred A. Seaton said the 1957 increase was due almost entirely to higher values for the mineral fuels, mainly crude oil and natural gas.

He pointed out that the higher values were sufficiently large to offset declines in production for most other minerals as well as sharp drops in the prices of base metals.

Follis Prediction

R. G. Follis, Standard Oil Company chairman of the board, said it is anticipated that oil gains will be experienced on both the domestic and free foreign fronts in 1958, barring any unforeseen disruption of normal activities.

During the year ahead, he said, it is believed that United States oil requirements will average nearly 9,100,000 barrels daily or close to three per cent higher than 1957.

Wood Optimistic

Robert L. Wood of Midland, Texas, president of the Independent Petroleum Association of America, analyzed the outlook for the petroleum industry in 1958 as calling for concern but not discouragement.

"Petroleum productive capacity for the first time averaged more than 10,000,000 barrels daily in 1957," he explained.

Pacific Coast Gains

The industrial outlook points to a continual and rising demand for petroleum on the Pacific Coast. S. F. Bowlby, Western Oil and Gas Association president, recently said that demand is expected to climb as much as four per cent, a 50,000-barrel-daily boost from 1,200,000 to 1,250,000 barrels a day.

With the population increasing at approximately three times the national rate, demand for petroleum products has nowhere to go but up. As a striking example of the influx of people to California, Los Angeles County alone gained 193,000 new residents during 1957 to a total of 5,758,000 when the year closed. The population of the county in 1950 was 4,151,680.

Other factors bearing on rising demand on the Pacific Coast is the great boom in all industries and the higher standard of living which naturally results in more and more energy requirements per capita.

California fields accounted for an average production of 930,000 barrels of crude oil a day. This figure is not likely to vary much in 1958 unless full-scale drilling is set in motion in the tidelands.

Four Corners Line

When the Four Corners Pipeline is opened next February, it will mark the first time crude oil has ever been piped into California.

Some idea of the growing importance of the Four Corners is illustrated by wells in the Aneth sector which are completed with initial potentials ranging from 600 to 3000 barrels of oil a day. The pipeline is being financed by six companies and embraces a cost of more than $50,000,000.

Primary capacity will be 70,000 barrels a day, with a potential capacity of 160,000 barrels or some 58,000,000 barrels annually.

Opening of the Four Corners-Los Angeles line will speed up development in fields in the Four Corners area in all directions. Royalty payments to landowners in the area will begin, employment will be stimulated and the new income will have a pronounced and salutary effect upon the whole area.

Petroleum currently supplies in excess of 90 per cent of the energy requirements of the Pacific Coast and it is generally foreseen that within a decade this figure will jump to 95 per cent.

Wider and more intensive exploration and development operations are anticipated in 1958 in Oregon, Washington and Alaska, particularly in areas here and there where the past year was the scene of minor or major discoveries.

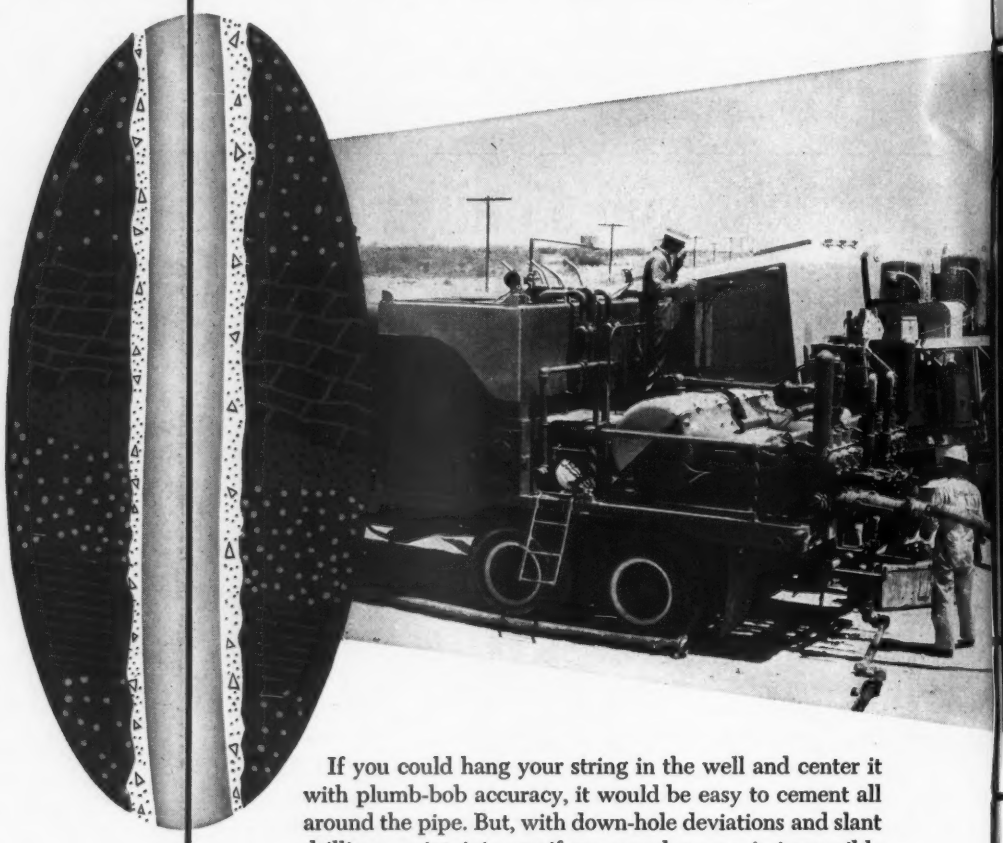
New Pools

Three new fields were opened in California in 1957 and 26 pools discovered. In the year preceding, six new fields were found.

There were about 140 new wells completed each month in 1957, against an average of 148 for the previous five years.

On the horizon for the Los Angeles urban area is an expansive drilling campaign to the relatively deeper formation. Dozens of drilling programs have been mapped out for promising oil producing districts and with actual operations only awaiting okays by the Los Angeles City Council and The Planning Commission.

CENTER before you cement



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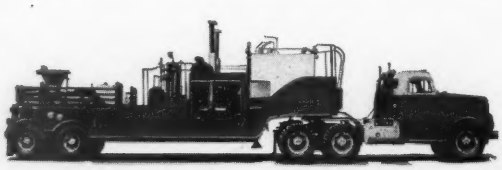

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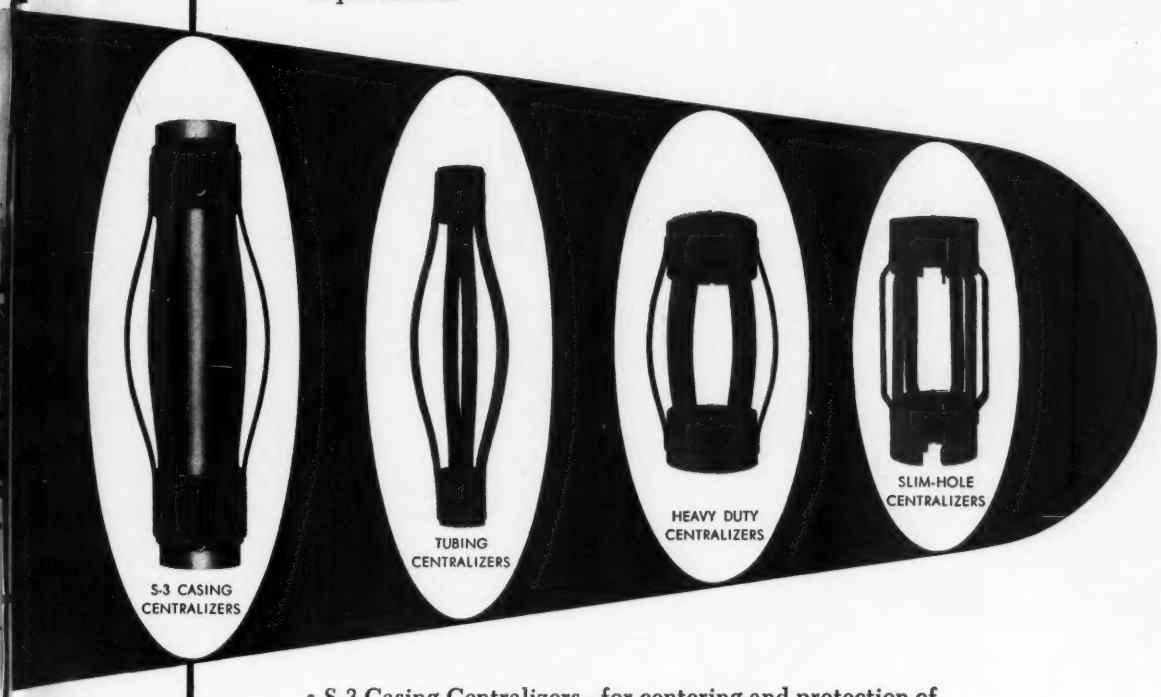

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Petroleum LORE and LINGO

By Richard Sneddon

When is a Solid?

This deformation business and the related necessity of fixing some borderline between solids and liquids has bothered scientists down through the ages. The trouble is that under the requisite conditions, gases can be solidified, solids can be liquefied, both solids and liquids can be gasified, and it seems, indeed, that no state of matter is permanent or inalterable. Shakespeare must have sensed that old terra firma was not quite so "firma" as we supposed, for in Scene I of the first act of Macbeth, there occurs this line: "The earth hath bubbles as the water has." And, anyone who has ever been exposed to a California temblor will agree that the earth also "hath waves as the water has." We are all familiar with the fact that the lava which belches from live volcanoes is molten rock. Many of us have seen steel flowing easily from the furnaces in which it is smelted. So, we are fully aware that even the most rigid and immobile substances can be reduced to liquid form.

Light on the Subject

The astonishing revelation of research in this area of physics is that even when maintained at ordinary atmosphere temperature, many solids will in the course of time give distinct signs of plasticity and even fluidity. Years ago I learned of some experiments conducted by Lord Kelvin, noted Scottish physicist and mathematician, in an effort to shed some light on this perplexing problem. In one of these he poured into a large glass bowl about three inches of water and on its surface floated a few small corks. Then he fitted snugly into the bowl, immediately over the water, a slab of shoemaker's wax, also about 3 inches thick. On top of the wax a few lead pellets were laid, and they in turn were covered with water.

Chaos from Confusion

Now shoemaker's wax at ordinary temperatures is a hard substance which has always been regarded as a solid, but, believe it or not, although this whole setup was maintained at normal temperature, the pellets

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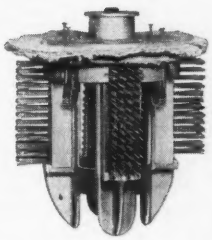

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finally found their way through the wax to the bottom of the bowl and the corks came through in the other direction to float on top. And here's the rub! When it was all over there was no change in the wax. In other words, as the pellets went down and the corks went up, the wax closed in behind them, leaving no evidence of their passing. All that remained was a perfect slab of wax in the same condition as it had been at the beginning of the experiment. It took a long time, of course, for all this to happen (I don't recall just how long) but in any case it helped to confuse the existing conceptions of the adjectives "liquid" and "solid."

The Continued Search

Just what the current investigations, field and laboratory, may eventually mean to the geoscientists who search for oil is sometimes not immediately discernible. They are a part, however, of the total effort to determine exactly what happens when sediments are piled one upon another to a depth of several miles and are then left for a few million or a few billion years. The search is never ending. Every discovery of consequence opens additional avenues of inquiry. A new ologist is added to the battery every day; the old ones are constantly looking for improvements in their instruments and techniques; and nothing either in the way of process or device is allowed to remain static for long.

Velocity Methods

Geophysicists are perfecting a velocity method of logging the sedimentary rocks. For this they have developed an instrument that records the speed of sound travel through layers that make up the geological column. Instead of discharging a shot of powder as is done in seismic surveys, high frequency sound waves are released at various intervals in a small diameter test hole. Those who ought to know claim that this method when properly applied is comparatively inexpensive and very effective. Practically everything that is being done ashore by the land-bound geoscientists can also be accomplished by the submarine variety. These latter bring up rock samples, make contour maps, take photos of special features, and even conduct sound velocity surveys. They are becoming more and more at home down in the deeps with all the finny denizens, and naturally are becoming more expert at interpreting what they see about them. In addition to all that, it is so quiet and secluded in the subsea gardens that people are flocking down there to get away from traffic, smog and politics. It was recently reported that a spear fishing enthusiast shot at what he thought was an unusually large lobster, lurking in an underseas cave. He found out, too late unfortunately, that it was his next door neigbor who, having quarreled with his wife earlier in the day, had just gone down below for a short sulk.

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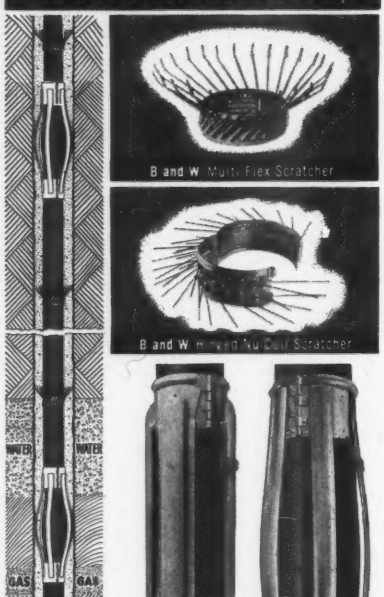

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More on the Birth

Referring once more to the matter of genesis, it is now claimed by certain investigators that petroleum is not quite as ancient as the geopeople have long been prone to believe. The contention is that the formation of crude oil, particularly in the sea, is going on all the time, and a small quantity of gasoline has actually been distilled from mud flat deposits that were definitely just a few thousand years old. This may explain a phenomenon that startled California oil men about 20 years ago. It was the discovery of a gasoline field down on the waterfront at Wilmington on reclaimed land, largely occupied by Mexican squatters. Immediately following the first find, the fever spread and in no time at all there were dozens of small wells being produced by hand-operated pumps and yielding a few barrels a day each of very good gasoline. The wells were only a few feet deep and a most interesting fact concerning them was that their fluid level rose and fell with the tide. Because of the fire hazard, the entire project was finally halted. It was never publicly admitted, but it seems reasonably certain that the field resulted from a leak in some oil company's gasoline line. Anyway, while the fun lasted, the Mexican

operators pumped enough fuel to keep their jalopies running steadily between Wilmington and Olvera Street and for a brief space of time at least enjoyed all the excitement of oilwell ownership.

The Positive Approach

And here, it might again be noted that advances in existing technique are taking place very rapidly. Scientific equipment and devices are also constantly being improved. Altogether new systems are daily being devised, and new sciences are constantly being enlisted to aid the finding effort. The straight line that constitutes the shortest path to a positive oil finding routine has not yet been found. It may never be, as many geoscientists contend, but I can't help feeling that with such a concentration of brain power focussed on the problem, success is practically inevitable.

The Amateur Sleuths

It is a stimulating fact that substantial and long sustained reward can come to a successful prospector. That is why a considerable number of neophytic scientists continue to forage through their week-ends with Geiger counters, scintillators, Brunton compasses, violet ray lamps, and a stash of other instruments and implements, searching avidly for the golden fleece. These are the doodlebuggers of today, still in most instances not fully equipped academically to pursue a logical program of search, but certainly more basically sound in their approach than the ancient manipulators of witch hazel twigs, or the psychic seers with the sensitive neck ruffs.

Remember, a decrepit cabhorse once won the English Derby. Ellis Parker Butler's famed "detekative," Philo Gubb, never solved the case he was working on but invariably came up with the answer to a much more important one, after the manner of the "Three Princes of Serendip" to whom we are indebted for the interesting word "serendipity" (finding valuable or agreeable things when one is searching for something else). Who knows but that by some such perversion of logic, one of these weekend treasure hunters may stumble into something that will prove to be the key to the entire finding situation. It is not likely, but as Herb Shriner would say "it's possible."

The Geranium Hunters

All of this, by the way, recalls the tale of the irate farmer who, when uranium prospecting became a national obsession in which many oil men joined, protested vigorously at a community indignation meeting that he was "sick and tired of these city guys romping over his property with goober counters trying to locate geraniums." And certainly there is nothing more annoying to a landed proprietor, not yet smitten by the prospecting urge, than to have a horde of amateur prospectors swarming over his property.

Other Oil Sources

To crash on, however, having discussed the particular sedimentary rocks that are the commonly recognized repository of petroleum, it should now be noted that there are at least

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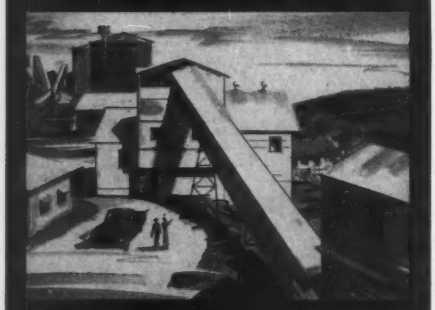

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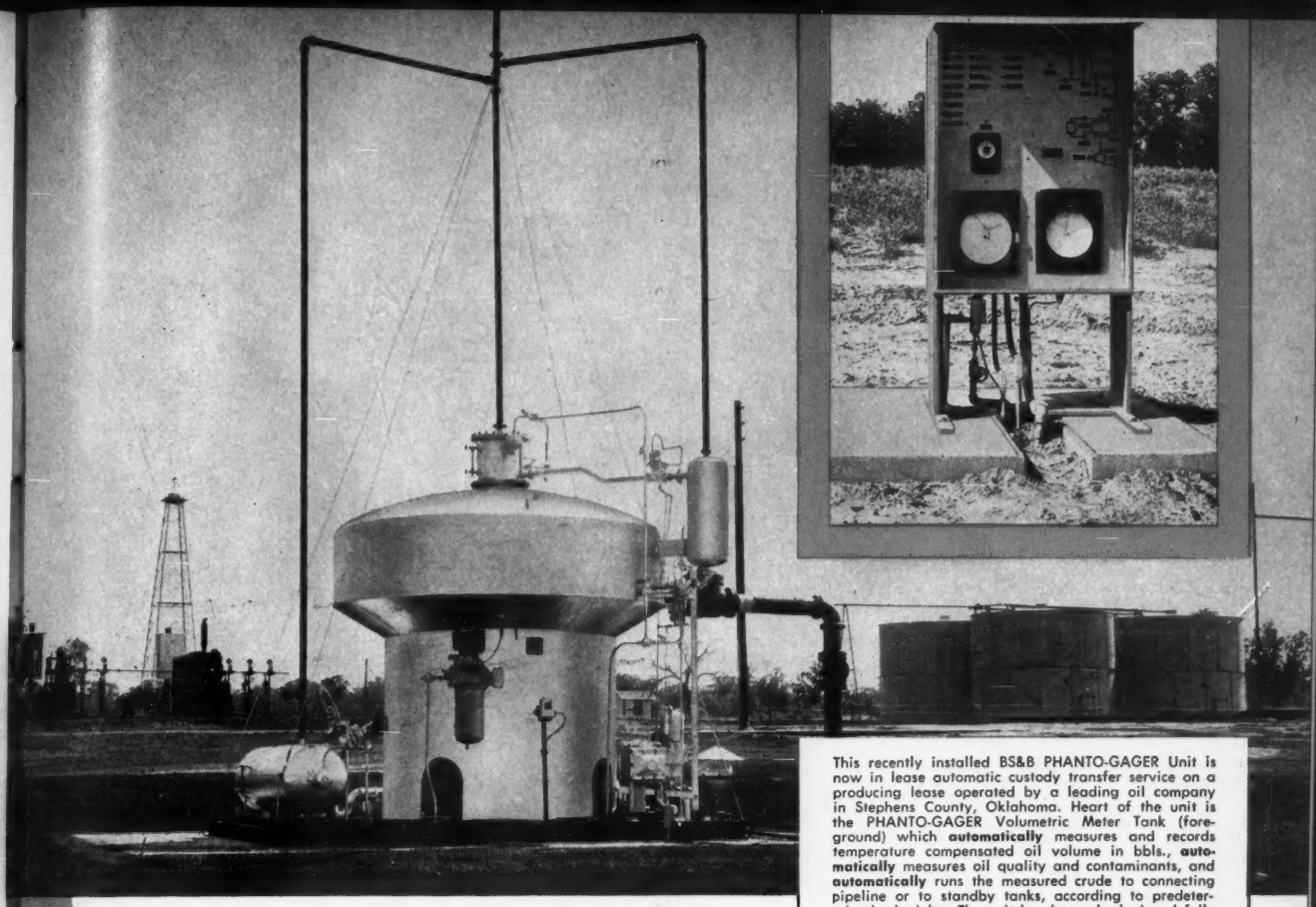
three other potential oil sources that have commanded the attention of the industry for quite some time. These are oil shales, tar sands, and Gilsonite, any or all of which may eventually be required to help satisfy the growing domestic need for oil and its products. Shale is a waxy sort of rock that occurs abundantly throughout the world. It is said to have been formed in ancient lakes and seas that were teeming with vegetable and animal life, mostly the former, and in which the accumulation of mineral and other inorganic material took place very slowly. The word "shale" is from the same root as "shell" and may have been suggested by the fragility of most types which can be broken or peeled off with shell-like ease.

Derivation of Shale

The dictionary tells us also that it is "fissile" which is a Latin derivative, meaning that it splits readily. The eargesplitten atomic word "fission" is from the same source. Oil shale varies in color from light brown to black, is quite strong and tough but can be cut with a knife and, indeed, is carved and polished by the esthetically inclined to produce all sorts of interesting and ornamental articles. It owes its waxy feel to the presence of kerogen (Greek **keros,** "wax", and **gen,** "of a certain kind"), which when heated above 750 degrees Fahrenheit yields a hydrocarbon oil that can be refined into commodities much the same as those obtained from petroleum. In the attempt to reduce the cost of the total shale operation and so to give it a reasonably competitive status in relation to petroleum, some ingenious processes and devices have been developed. In mining, for example, shoring was eliminated by simply leaving columns of undisturbed shale to support the roof.

Retorting Methods

About 1923 or 1924 I was a member of a research squad that was delegated to test the efficiency of various shale retorting stills. Only two years earlier the Bureau of Mines had made its now famous prediction that the petroleum supply would peter out in twelve years, and this testing binge was part of the scramble for new sources of oil. The most successful of the units we examined was one we operated in Casmalia, California, where, incidentally, there was quite a shale deposit. In this, the charge was loaded into a cylindrical retort, having a conical shaped bottom. A hunk of burning waste was tossed on top to set the shale afire, and suction applied at the bottom dragged in additional air keeping the fire going. As the wall of fiame progressed downward, the hot gasses decomposed the kerogen and the oil vapors so formed were condensed in the cooler regions below. My most vivid recollection of this adventure is that I sampled the shale oil with a tin cup as it gulped from a 4 inch pipe into the receiving tanks, and every time I took a sample I took a bath. Now crude shale oil has a high sulphur content and is anything



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BS&B PHANTO-GAGER Units are offered for lease automatic custody transfer service in various sizes as skid-mounted assemblies, and with single or multiple metering and surge tanks. Fail-safe controls insure that no oil will be lost in case of power failure because:

1. The fill and empty valves on the meter tank are electrically interlocked.
2. Oil cannot be introduced into the meter tank after the measuring cycle has started, nor can oil be removed from the meter tank (other than to the pipeline) after the top gage has been made and before the run is completed.
3. All electrical controls, motors, instruments and wiring within 150 ft. of the meter and surge tanks are explosion proof.

The BS&B PHANTO-GAGER and the BS&B PHANTO-PUMPER, when used together, make up the complete BS&B PHANTO-MATIC Lease System which provides *full lease automation* from the wellhead to the pipeline. For full information, contact your nearby BS&B Man, or write to...

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West Coast Sales and Service Division, Dept. 1-BK1
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8915 Rosedale Highway, Bakersfield

but sweet smelling. There were no showers in our camp and for a week or so I was probably the most despised and rejected chemist west of the Rockies.

From Batch to Continuous

This, of course, was a batch process and when one charge had been burned out, the retort had to be emptied and refilled with fresh shale. However, one of the most popular of currently approved systems employs the basic idea of this still with, of course, considerable modification. The new process is continuous. The spent shale is disposed of and fresh shale is added automatically. This provides a larger and more uniform cold area for condensation. There have been other refinements too, but this conversion to continuous operation is the most significant change that has taken place. The burning of the shale to effect its own distillation and to provide heat for other essential phases of the operation are an important contribution to the overall economy of the system, which comes nearer to being competitive with petroleum production than any other method so far developed. Some idea of the magnitude of the shale reserves may be gathered from the fact that in the Green River formation of Colorado, Utah and Wyoming, the deposits are 3,000 feet thick. The so-called "mahogany ledge" in the Piceance Creek Basin is 70 feet thick, yields 30 gallons of oil a ton, and is estimated to contain 100 billion barrels. That is three times as much as the currently available petroleum reserves!

The Athabasca Tar Sands

The most exciting of the tar sands are those along the banks of the Athabasca River in Northern Alberta, Canada. This is a fabulous deposition of oil-impregnated material, about 300 feet in depth, that outcrops over an area of more than 3,000 square miles. Geologists have declared that there are 300 billion barrels of oil in this strange formation. Unfortunately, however, although oil constantly oozes from the sands, and its segregation would seem to be a relatively simple matter, no one has yet come up with a really profitable plan of large scale operation. Some success has been achieved by reducing the viscosity of the oil with hot water and floating it off, and a method involving the use of centrifugal force has been or is being attempted. There are operators who believe the Athabasca tar sands can be made to give up their oil by in situ (in place) burning. That is, by setting fire to the formation and using a wall of flame to drive released gas and oil to production shafts or wells!

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. . . to get peak performance longer, Cooper-Bessemer is now factory-installing STITT New Triple Ignitor Spark Plugs. STITTS last up to 10 times longer, cut downtime, increase magneto life. Also factory equipment in other leading oil field engines.
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The Payoff

There is evidence that the tar sands could be made to yield 10% of gaseous hydrocarbons, 75% of gasoline, and 15% of heavy asphaltic residue, which is all very fine as far as it goes, but a distressing fact about the oil is that it contains a very high percentage of sulphur, and sulphur is the refiner's mortal enemy. It forms all sorts of corrosive substances, is costly to remove and troublesome in many ways, and besides all that in many of its combinations it has an effluvium that would nauseate a carrion crow. However, it may be safely predicted that sooner or later some bright process engineer is going to devise a scheme for freeing the treasure of Athabasca from its imprisoning sands at a rational cost, and Canada is going to be vastly enriched thereby.

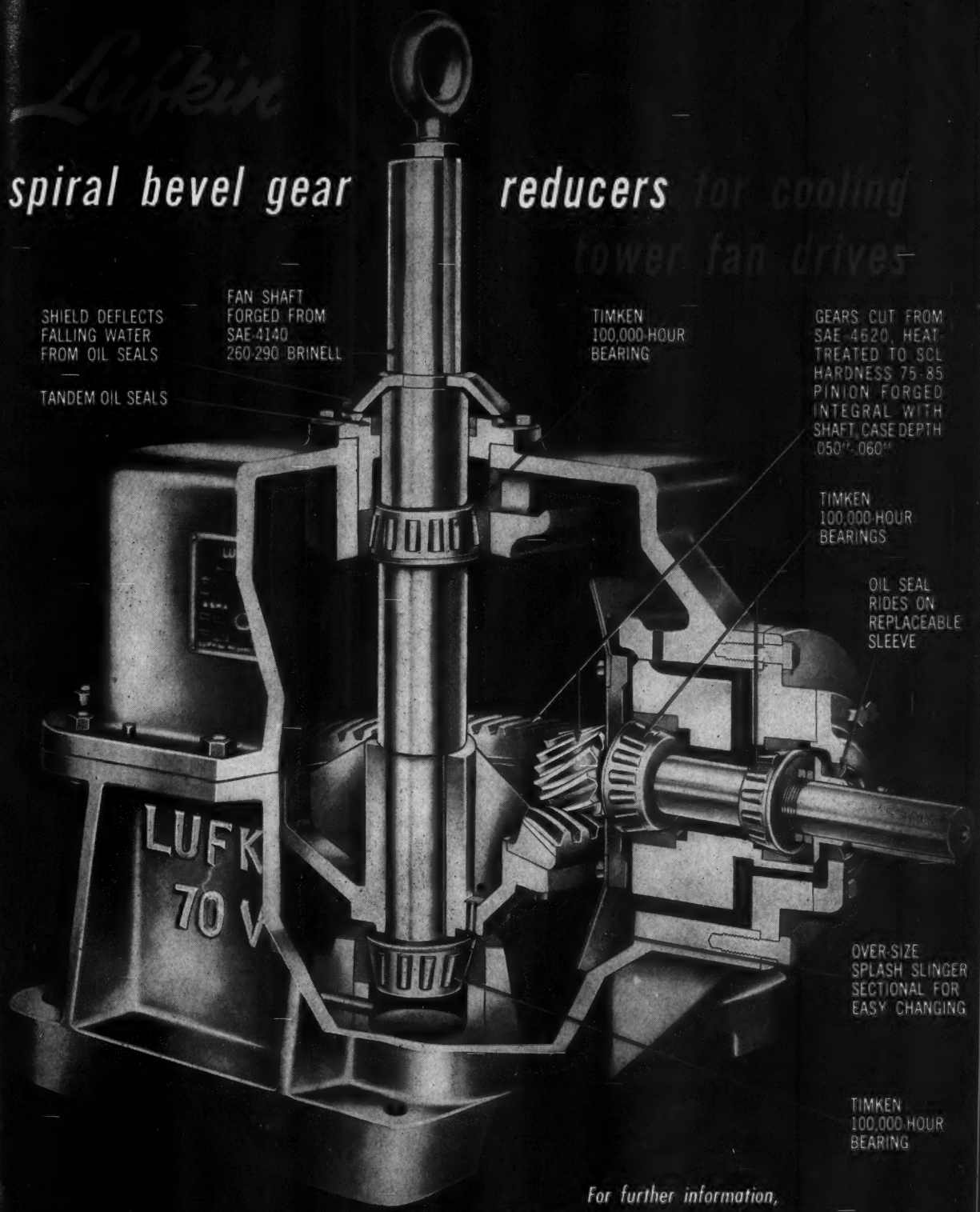
The Heritage of Sam Gilson

Gilsonite was named for Sam Gilson who, if he didn't discover it, was certainly the first to become excited about it, and to try to excite others. It is also known as Uintaite because it is a product of the Uinta Basin in Utah, and up to the moment that is the only place it has been found in the United States. It is a naturally occurring solid, black hydrocarbon, and expert evaluators contend that the known beds contain about 16 million tons. The mines have been worked since 1884 and Gilsonite, which is of high purity, has been used for making asphalt tiles, battery cases, insulation, building materials, etc. It is now mined with the aid of high pressure water jets, is crushed to requisite size, and is then pumped as a slurry 72 miles to the refinery. There treatment produces a high octane gasoline, some fuel oil and a high quality metallurgical coke that is much in demand by certain ore smelting industries.

Coal, as every schoolboy knows, is largely composed of carbon. As a matter of fact, as already noted, **carbo** is the Latin word for "coal". Be that as it may, when hydrogen and carbon are chemically combined they form hydrocarbons just like those in petroleum. This process is known as hydrogenation and it has already been perfected, and of course constitutes another means of producing oil. But, it must be remembered that while being able to manufacture oil synthetically or otherwise may eventually become a very useful accomplishment, it can never be a profitable one until it can be done by means that are less expensive than those now employed by the very resourceful petroleum people.

Lufkin

spiral bevel gear reducers for cooling tower fan drives


SHIELD DEFLECTS FALLING WATER FROM OIL SEALS
FAN SHAFT FORGED FROM SAE-4140 260-290 BRINELL
TIMKEN 100,000-HOUR BEARING
GEARS CUT FROM SAE 4620, HEAT TREATED TO SCL HARDNESS 75-85 PINION FORGED INTEGRAL WITH SHAFT, CASE DEPTH .050"-.060"
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OIL SEAL RIDES ON REPLACEABLE SLEEVE
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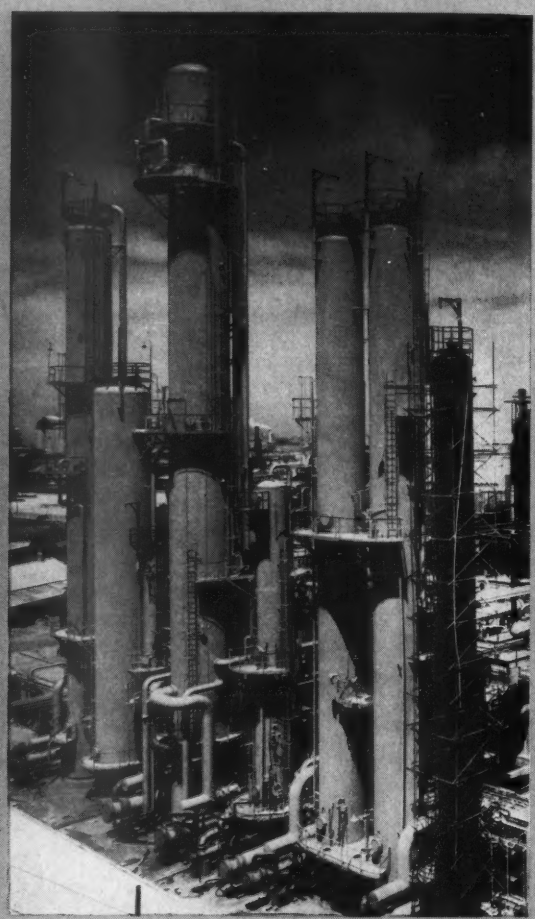
1.

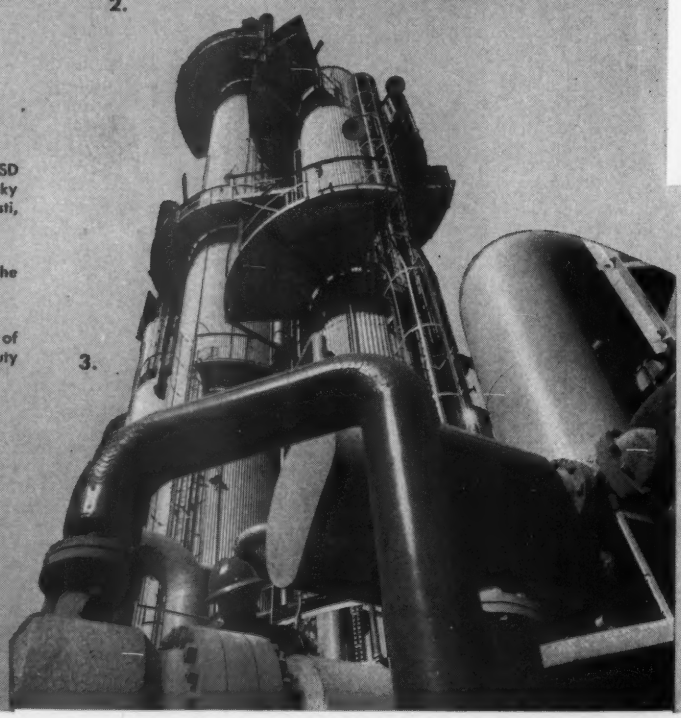


2.

1. The solvent extraction columns of the 5,000 B/SD Udex unit are dramatically framed against the sky at the Delhi-Taylor Oil Corporation's Corpus Christi, Texas, refinery.

2. Shown here is the Udex unit in operation at the Delhi-Taylor refinery, Corpus Christi, Texas.

3. Though highly functional the extraction towers of the 5,000 B/SD Udex unit add an element of beauty at the Delhi-Taylor refinery.



3.

Platforming—Udex Units Open New Petrochemical Market To Delhi-Taylor

By F. P. Sewell
Vice President
Delhi-Taylor Oil Corporation
Corpus Christi, Texas

F. P. Sewell

Customer confidence, plus our own confidence in the growth potential of petrochemicals prompted us recently to enter this field. Our investigation, some time before the spring of 1956, indicated a substantial market for benzene to be used in synthetic chemicals. We decided to build an installation for the production of aromatics. We needed a process that could smoothly fit into our operation, a process that could economically produce aromatics of highest purity. After carefully examining the available processes, we found that the Udex process efficiently and at low cost extracts benzene, toluene and xylenes simultaneously from a Platformate which we could produce in our existing Platforming unit. We were confident the Udex process was our answer.

The next step was a meeting with engineers of Universal Oil Products Company in the spring of 1956 to determine the design for the new Udex unit. With the design fitted to serve our requirements the only remaining problem was the time necessary to complete the unit. Accordingly, purchasing and preliminary expediting of the major components were left to UOP. This assured us of the fastest possible delivery of these items. We are indeed pleased that in just over a year, from design to on stream, we were able to keep our promise to our customers, supplying benzene exceeding nitration-grade specification. With successful aromatic production and a marketing program under way, we were also able to achieve our basic objective, "product diversification."

Increases Value of Products

A 5,000 B/SD Platformer, on stream since 1953, was designed originally with provisions to facilitate its change-over to the production of a Platformate best suited to aromatic extraction. Since 1953 this Platformer has been producing a Platformate used to up-grade the octane number of our pool gasoline. Thus, through converting our production to aromatics we were able to raise, substantially, the value of our products from this unit.

During the planning stages of the Udex unit with UOP we also launched into yet another phase of our expansion program. As a custom refiner we sell motor gasoline in quantity to several customers. We keenly feel a sense of responsibility to maintain the high octane level and quality of our pool gasoline consistent with the demands of today's high compression engines. To this end we made arrangements with UOP to install another Platformer, a 10,400 B/SD unit, and a 10,400 B/SD Unifining* unit. The Platformate produced in this unit, on stream in May, 1957, is used as a high octane blending component in our pool motor gasoline.

These units are also used to provide additional Udex feed stocks. This is done by charging a select feed to the Platformer-Unifiner in a blocked-out operation. The resulting Platformate is charged incrementally to the Udex unit. This Platformer is our third, and the second Platforming unit at the Corpus Christi refinery. The efficient operation and high quality of products from our first two Platformers influenced our decision to install this third Platformer.

Aromatic Production

Production of aromatics at the moment is approximately 2,000 B/SD. The growing benzene market includes application in the manufacture of phenol and styrene plastics, synthetic fibers, agricultural chemicals, detergents, pharmaceuticals and other chemicals. Toluene and xylenes are sold as chemical raw materials and solvents. Toluene finds some use also as a blending agent in aviation gasoline and as a "super-premium" gasoline blending stock.

Production of benzene, toluene and xylenes from UOP Platforming® and Udex® units provides Delhi-Taylor profitable product diversification—

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30 ALGONQUIN ROAD, DES PLAINES, ILLINOIS, U.S.A.

More Than Forty Years Of Leadership In Petroleum Refining Technology

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Personalities IN THE NEWS

Charles E. Whittaker, President of Globe Oil Tools Co., Dies

Charles E. Whittaker, President and General Manager of Globe Oil Tools Co., Los Nietos, California, died Saturday, December 21, 1957, after a long illness. Mr. Whittaker, a native of Indiana, was born in 1907. After completing his schooling in California, he began his career with Globe Oil Tools Co. shortly after the company was founded in 1929.

Charles E. Whittaker

"Charlie," as he was known by all who knew him, worked his way up through the ranks, holding such positions as Night Foreman, Machine Shop Superintendent, Sales Manager and General Manager. In 1950 he became President. Charlie Whittaker, although not a graduate engineer, was responsible for the development and marketing of the popular Globe "2-Cutter" Rock Bit and the Globe Junk Catcher, two of the leading items in the Globe line of Oil Well Drilling Equipment. He also created much of the single purpose tooling and specialized, precision equipment used in the manufacture of Globe products. Mr. Whittaker is survived by his widow, Mrs. Helen Whittaker; a son, Richard Whittaker, who has been acting as Vice-President and assistant General Manager of the Globe Company; a daughter, Mrs. James Eads; and six grandchildren.

Gillingham Named President of Schlumberger

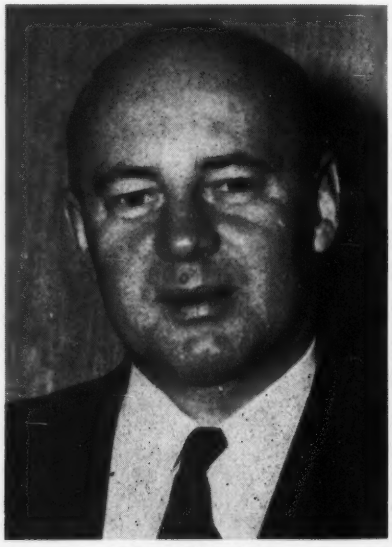
William J. Gillingham, who joined the Schlumberger Well Surveying Corporation only five years after the corporation's first electric logging project in this country in 1929, has been named President of the firm, Pierre Schlumberger has announced. Mr. Gillingham has been Executive Vice President.

Mr. Schlumberger said that with the reorganization of the world-wide Schlumberger operating companies into Schlumberger Limited, which took place in March, 1957, he has been required to spend an increasing amount of his time on affairs of Schlumberger Limited beyond activities of the United States operating company. This change will allow him to devote full time to his duties as President of Schlumberger Limited. He had been President of Schlumberger Well Surveying Corporation since 1946 and will continue as a member of the Board of Directors.

Mr. Gillingham, who as an engineer and field operating man has helped develop markets for a number of logging techniques and tools, became interested in the field of electric logging when Conrad Schlumberger, one of the company founders, lectured at the Royal School of Mines early in 1934.

Born in England in 1912, Mr. Gillingham was graduated from the Royal School of Mines in 1933 with a degree in Petroleum Technology. Following graduation he taught half time and engaged in research. He joined Schlumberger in 1934 after completing his teaching assignment.

So, the young engineer who went to work on the basis of a lecture, so to speak, found himself headquartered in Houston, carrying out assignments as a field engineer. From Houston, Mr. Gillingham went to Houma, Louisiana, moved on to Shreveport, Louisiana, was assigned for a short time to Bradford, Pennsylvania and then had a tour in the Midland area of West Texas.



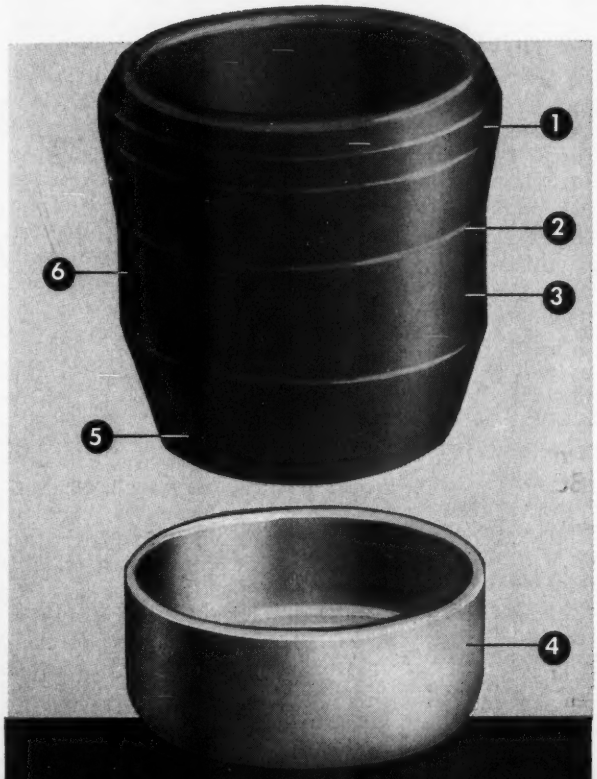
Wm. J. Gillingham

He was made manager of the Louisiana Division with headquarters in Shreveport in 1938 and kept that post until 1947. During that period, Louisiana Division headquarters was moved to New Iberia and finally to New Orleans.

In 1948, Mr. Gillingham was assigned to Caracas, Venezuela as Vice President and General Manager of Schlumberger Surrenco, SA. He returned to Houston in 1951 as Executive Vice President, was named to the Board of Diectors in 1954 and to the Board of Directors of Johnston Testers, Inc. in 1956.

The new Schlumberger President is a member of the American Institute of Mining Engineers, American Association of Petroleum Geologists and

GUIBERSON'S Improved GW PACKER CUP



1. Exclusive oversize flexible lips — full pipe contact on initial seal.
2. High-pressure seal — heavily reinforced, heavy cup wall.
3. Oil and gas resistant compound — designed for high pressures and temperatures and long life.
4. Steel thimble.
5. Internal seal prevents leakage between cup and mandrel.
6. Extra strength and rigidity — spring steel wire locked in metal bushing.

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SEALS AUTOMATICALLY— STATIC OR MOVING

When your job calls for pack-off in pipe at any depth . . at high bottom-hole temperature . . Guiberson's GW cup is the cup for the job. It seals and holds high or low pressures in washing . . cementing . . pipe testing . . sealing off casing leaks . . remedial work and other production and testing applications.

This flexible-lip cup is a Guiberson development, made possible by Guiberson's long experience in designing and producing rubber products of exceptional value. It automatically gives a positive seal the instant its flexible lip enters the casing. It's built to hold high pressures . . the greater the differential pressure across a GW cup, the tighter it seals.

Guiberson's GW cups are available in standard, special, heavy duty and special heavy duty types in a wide range of sizes. Investigate these remarkable packing elements now . . have them on hand for your next job.

PRESSURE WASHING WITH GW CUPS

Two pairs of GW cups give *double assurance* of a tight seal with the high pressures used to clean out perforations and wash the formation face. Note the smaller diameter GW cup on the moving piston at the top of the tool.

the American Petroleum Institute.

He is one of the founders in Houston of St. Martin's Episcopal Church, is on the Executive Committee of Junior Achievement and also is on the board of The Lighthouse for the Blind.

Mr. Gillingham is a member of the Petroleum Club, Coronado Club and Lakeside Country Club.

Mr. and Mrs. Gillingham reside at 5501 Longmont in Houston. They have three children.

Camblin Retires As Tretolite California Manager, Succeeded By Monson

Glenn W. Camblin, vice-president of Petrolite Corporation and general manager of its Tretolite Company of California Division since it was established in Los Angeles in 1930, has announced his retirement, effective January 1, 1958, after more than 33 years of service in the Tretolite organization. He has been succeeded by Louis T. Monson, formerly chief chemist of the division and a 32-year man.

Tretolite manufactures and services the use of many specialty chemicals, principally in the petroleum industry. It pioneered the use of chemicals for separating water from crude oil; and its demulsifiers are used in oilfields throughout the world. It also makes corrosion inhibitors, foam breakers, wax-removers, desalting chemicals, scale preventives, and anti-stripping agents which bond asphalt to rock in road-building.

Camblin was first employed by Wm. S. Barnickel & Co., the predecessor company, in 1924. He worked as a field service engineer in Kansas until 1926, when he was transferred to California. He became manager of California operations with establishment of the California division in 1930; and was made vice-president of Petrolite Corporation in 1939.

He is a graduate of Purdue University; and served in the infantry in World War I as a captain. After his war service, he was employed by the Waite Phillips and Mid-Kansas oil companies before joining the Tretolite organization in 1924.

Glenn Camblin has many friends in the "oil country;" and has always shown a lively interest in the well-being of his employees, fellow-workers, and associates. He is a man of many interests, including astronomy, "rock-hounding," marksmanship, photography, and long-distance rooting for the Purdue football team. He is an enthusiastic grand-and great-grandfather.

He is a member of American Petroleum Institute, Petroleum Production Pioneers, Tretolite Company of California's Quarter-Century Club, Los Angeles Petroleum Club, Los Angeles Athletic Club, and Jonathan Club. He is a 32° Mason, and a Shriner in Al Malaikah Temple.

Louis T. Monson, his successor, joined Wm. S. Barnickel & Co., in 1926, as a research chemist in the company's suburban St. Louis laboratory. He has been a member of the Tretolite organization since that date.

He received his B.S. and M.S. in chemical engineering and chemistry, respectively, from Washington University (St. Louis), and also served as a teaching assistant there. On campus, he was intra-mural tennis doubles champion and played intramural baseball. He edited the BENT of Tau Beta Pi, 1927-42. He is also a member of Sigma Xi and Alpha Chi Sigma, and of Sigma Phi Epsilon social fraternity.

Monson transferred to Tretolite Company of California in 1931, and was instrumental in the developments of its laboratories. He has been chief chemist since 1936; has directed research for the California division; and has been a member of Petrolite's patent staff, as well. He is named as inventor or co-inventor in 49 U.S. patents, and has others pending. He is the author of a number of papers, mostly dealing with petroleum emulsions and their resolution; and he has prepared a series of nomographs on the capacities of tanks and pipes, etc. He has taught courses on petroleum treating methods, and has lectured on the subject at Stanford University and University of Southern California, by invitation.

He is a member of the American Chemical Society, American Petroleum Institute, National Association of Corrosion Engineers, Petroleum Production Pioneers, Tretolite Company of California's Quarter-Century Club; and is a registered chemical engineer in the State of California.

Monson lives in the North Whittier Heights area of Los Angeles County, where he raises avocados on his 7-acre grove. He also professes a strong liking for sports (on TV, that is) and is the proud grandfather of 6 grandchildren. He is president and director of North Whittier Heights Improvement Association, Inc., and a director of

Glenn W. Camblin, retiring general manager of Tretolite Company of California division of Petrolite Corporation; C. M. Blair, president of Petrolite Corporation; and Louis T. Monson, Camblin's successor. (Left to right) Photo was taken at dinner honoring Camblin at Los Angeles Statler Hotel.

Whittier Community Concert Association.

Woodrow J. Dickson, a 20-year veteran Tretolite Company of California staff member, has been named manager of the laboratory of the division, to replace Monson. Except for wartime service in the Air Force and Chemical Warfare Service, in World War II, he has been engaged in demulsifier development work for Tretolite. He is a member of the Los Angeles Section of the American Chemical Society, and attended Pasadena City College and University of Southern California.

Dasdorf Joins Jorgensen Company

Earle M. Jorgensen Co., distributor of steel and aluminum products, has announced the appointment of J. H. "Jack" Dasdorf as metallurgical engineer. In this capacity, he will work with steel users, helping them in the selection of materials and offering technical assistance.

J. H. Dasdorf

Dasdorf's services will be available to customers served by Jorgensen's Los Angeles plant. The firm carries complete warehouse stocks of alloy, stainless, tool, carbon, and specialty steels, as well as aluminum.

Prior to joining the Jorgensen organization in September, Dasdorf was a metallurgical engineer with Schultz Steel Company in Los Angeles for three years. After graduating from Penn. State University in 1929, he was employed by Jones & Laughlin and Crucible Steel Companies in Pittsburgh as metallurgical engineer. In 1941, he entered the U.S. Army where he served four years, and he is still active as lieutenant colonel in the Army Reserve Research Development Program.

From 1945 to 1954, Dasdorf was with U.S. Steel Corp., serving as executive project administrator in the Philippines and chief metallurgist in the mid-continent area. He is a member of the American Society for Metals.

The Jorgensen Company also operates steel and aluminum distribution plants at Oakland, San Francisco, Houston, Dallas, and Tulsa.

Halliburton Announces Sales-Advertising Transfer

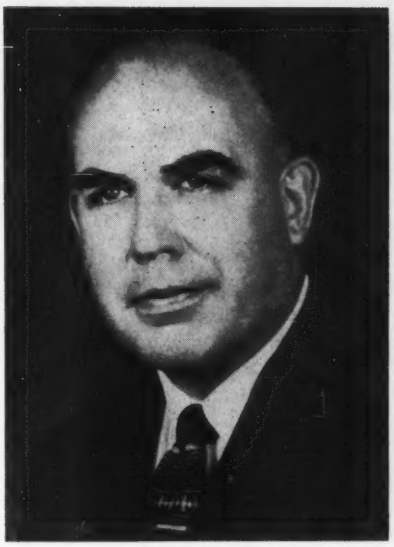
Grover Kilgore, vice president for sales and advertising of Halliburton Oil Well Cementing Co., announced a lateral transfer of duties between the firm's sales and advertising managers.

Lloyd H. Lawrence, former Halliburton sales manager, replaced Ed Trapp as the company's advertising manager. Trapp took over Lawrence's former position and became the new sales manager, effective January 1, 1958.

Trapp is a marketing specialist and first joined Halliburton in 1934 as a cementing truck driver in the Permian Basin. He has held the posts of division credit manager, sales engineer and has managed advertising and public relations for the company since 1955.

Lawrence started his Halliburton career in 1932 as a member of the general accounting department. He has since held the positions of sales accounting supervisor, sales analyst, and assistant sales and advertising manager.

Lloyd H. Lawrence



C. Ed Trapp

The job switch is described by Kilgore as part of the Halliburton training program.

R. A. Borel has just wound up 30 years of service with General Petroleum Corporation and has received official commendation from the company's board of directors and a diamond lapel emblem. He has spent the three decades in the pipeline department since joining General back in 1927 as a roustabout. He currently is second engineer at the firm's Grapevine location.

Ernest R. Parks of Los Angeles, consulting petroleum engineer, is among principal speakers named for the Kern County Business Outlook Conference to be held in Bakersfield, January 29. Parks's introduction to oil was in 1919 when he joined the U. S. Bureau of Mines. He resided in Taft from 1929 to 1934 when he was a member of Standard Oil Company of California.

Darrel L. Kirkpatrick, petroleum geologist consultant, has moved to the new Civic Center Building at 1601 H. Street in Bakersfield.

Oil Industry Hosts Needy Boys at Holiday Dinner

Fifty underprivileged teenage boys feasted on turkey and listened raptly to Reverend Bob Richards and Dr. Sammy Lee at a Christmas dinner given by the oil industry's R. M. Pyles Boys Camp at the Rodger Young Auditorium in Los Angeles. The holiday celebration was a warm climax to the camp's year-round program of assistance and guidance to needy youths from Los Angeles, Orange, Ventura, Santa Barbara, Kern and Tulare Counties.

Left to right: Jud Hillman, Stender Sweeney, Cy Rubel, Free Fairfield, Sam Bowlby, Red Aubert, Rev. Bob Richards, Bob Pyles, John Hancock, G. C. Pilkington and Dr. Sammy Lee

Assisting R. M. Pyles as hosts were many other top executives of oil companies, who gave each boy a gift. Also present were Peter J. Pitchess, Undersheriff of Los Angeles County, Captain James Glavas of the Los Angeles Police Department, Superior Judge Kenneth E. Morrison of the Orange County Juvenile Court and Joseph Kennick, head of the Long Beach Juvenile Department. Law enforcement agencies and courts in the six counties aid in selecting deserving boys to attend the summer camp, whose site is approximately thirty-five miles south of Sequoia National Park in the High Sierras.

In addition to giving hundreds of boys of all races and creeds two weeks in the mountain camp, the non-profit organization keeps in touch with its youngsters throughout the year by periodically visiting them to offer guidance and support in their everyday lives. Funds for financing this community welfare program are contributed by individual men and women in the petroleum industry and allied fields.

The camp was founded in 1949 by R. M. Pyles, a Signal Oil and Gas Company executive, and other leaders of the Petroleum industry who wanted to provide a summer vacation in the mountains for boys unable to afford it. Since that time, more than 2500 boys have enjoyed fishing, horseback riding, and other outdoor sports at the isolated but complete camp, which is six miles away from the nearest dirt road.

Among the oil industry officials attending the dinner were L. L. Aubert, Bankline Oil Company; Sam Bowlby, Shell Oil Company; Ned Brown, Brown Drilling Company; Earl Daniels, Hydril Company; Free Fairfield, Oil Tool Corp.; Wilbur Harrison, Apex Oil Company; John Hancock, Hancock Oil Company; Ronald Heath, Signal Oil and Gas Company; Vern King, consulting geologist; Kinzie Miller and Larry Miller, California Oil World; Frank Morgan, consulting geologist; C. C. Pilkington, Texas Company; Cyrus Rubel, Union Oil Company; F. R. Schmieder, Shell Oil Company; Ed Stearns, Universal Oil Company; Stender Sweeney, Richfield Oil Corporation; Ted Sutter, Baker Oil Tools, Inc.

On left, left to right: Wilbur Harris, John R. McMillan, Ted Sutter. On right, left to right: Frank Morgan, Ed Stearns and Ned Brown.

J. A. Smith has been promoted to Division Superintendent of Gas and Gasoline Plants in The Texas Company's Pacific Coast Producing Division, it was announced by J. H. Puls, Division Manager.

Mr. Smith, who has been Assistant Superintendent of the Gas and Gasoline Plants Division, succeeds N. H. Mull, who retired on January 1, after more than 35 years of service with Texaco. Mr. Mull, a graduate of the University of California at Berkeley, has been superintendent of the Gas and Gasoline Plants Division since April, 1930.

Mr. Smith joined The Texas Company in September, 1926, after graduating from the University of Colorado. He has served in various capacities in Texaco's Gas and Gasoline Plants Division since that time.

L. E. Woodruff, Division Gas Engineer, is being promoted to Assistant Division Superintendent, succeeding Mr. Smith. Mr. Woodruff is a graduate of the University of Southern California, and has been in Texaco's employ since June, 1930.

L. S. Osborne, vice president Union Pacific Railroad has announced that D. O. Churchill has been appointed assistant to vice-president-oil development with headquarters at Los Angeles, effective January 1.

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Whether you are drilling in remote areas or right in town, you'll drill more hole with less maintenance with C-E Swivels. An exclusive, easy-to-replace, one-piece cartridge washpipe packing extends the life of both . . packing and washpipe. C-E Swivels have high capacity and yet are slimmed down with less bulk and weight for easier handling on the derrick floor.

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Continental-Emsco Rotary Tables thrive on rough drilling conditions. They're able to operate 24 hours a day anywhere in the world with a minimum amount of downtime. Field-proven features give them this extra stamina . . make them smoother running, safer, more efficient. They're compact . . easy to handle and install at the rig. Each table is proof-tested under load before being shipped.

Your Continental-Emsco representative has all the data on this equipment . . call him today.

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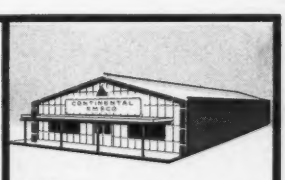

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Smith, Landgraff, Powers Promoted By Chiksan

Louis J. Smith has been appointed Vice President and Sales Manager of Chiksan Company and Chiksan of Canada Ltd. and Edward T. Landgraff has been made Vice President and Sales Manager of Chiksan Export Company, it has been announced by H. J. Hagn, President.

Mr. Smith, who joined Chiksan in 1948 and has been Eastern Regional Sales Manager since 1951, will make his headquarters at Chiksan's main office and plant in Brea, California.

Mr. Landgraff has been with Chiksan since 1946 and has been Export Sales Manager since 1954. He will continue to headquarter at the Company's Newark, New Jersey office.

Louis J. Smith

Edward T. Landgraff

Replacing L. J. Smith as Eastern Regional Sales Manager is John F. Powers, Jr., formerly Senior Field Engineer.

The changes in Chiksan's Sales Department were made as a result of the resignation of G. R. Winder as Vice President and General Sales Manager of Chiksan and its two subsidiary companies. Mr. Winder left to become associated with the Ohio Injector Company of Wadsworth, Ohio as Vice President of Marketing.

Chiksan Company, a subsidiary of Food Machinery and Chemical Corporation, is a leading manufacturer of swivel joints and flexible line assemblies, all-metal tanker loading arms, and oil-field equipment.

Standard Oil Company of California has announced several key personnel changes in its Southern California, Utah and Alaska producing operations. Some of the moves are a result of expanding Standard activities in Alaska.

W. H. Cochems, formerly assistant southern division production superintendent at Murphy-Coyote, has been appointed production superintendent there, succeeding C. N. Beyrle who retired January 1 after 36 years of service. Cochems was succeeded by M. E. Kinnebrew, formerly production foreman at Kettleman Hills.

J. T. Crooker has been named district superintendent, Alaska, with headquarters at Anchorage. He was joined there by R. L. Beckwith, former staff engineer, Producing, San Francisco, who now handles general engineering matters for Alaska operations. Crooker's office assistant is R. E. Vanderwall, formerly a specialist at Murphy-Coyote.

Other Alaska assignments include W. E. Whitney, engineer-development, who left the same post at Red Wash, Utah. C. N. Beyrle, drilling foreman at Red Wash, also went to Alaska, as drilling representative.

C. V. Chatterton has been named district superintendent for Red Wash. He has been acting district superintendent for several months.

Leas Advances At Jorgensen Company

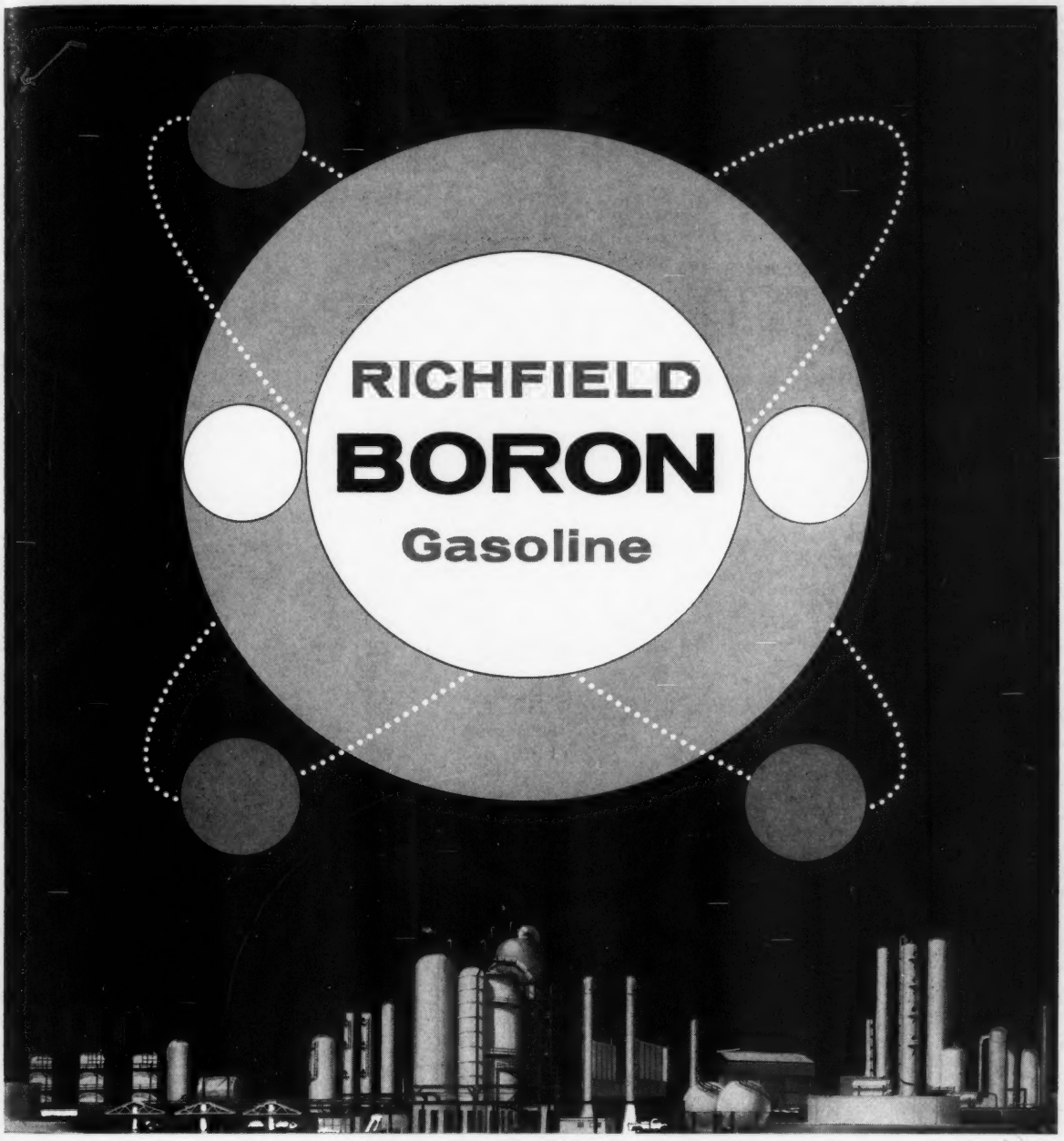
The appointment of Earl "Bud" Leas as west coast tool steel product manager has been announced by Earle M. Jorgensen Co., steel distributors. Leas was formerly vice president in charge of sales for Cook Heat Treating Company in Los Angeles for 16 years, and served as sales manager of Vanadium Pacific Steel Company, for one and a half years.

Earl Leas

Leas' primary function will be to provide technical assistance to tool steel users served by Jorgensen's plants at Los Angeles, Oakland, and San Francisco. He will be available to advise in the selection of proper material and help in solving problems of application and treatment of tool steels. The Jorgensen Company carries complete warehouse stocks of bars and billets in carbon tool steels, graphitic tool steels, tool and die steels, shock-resisting steels, high-speed steels, and hot-work steels. Stocks also include tool bits, drill rods, precision ground flat stock, and drill steels for mining operations.

The Earle M. Jorgensen Co. also operates steel distribution plants at Houston, Dallas, and Tulsa.

E. J. Barnes, Macmillan Petroleum Corporation, Los Angeles, and H. D. Webb, Envoy Petroleum Company, Long Beach, were elected executive committee members of the Asphalt Institute at the institute's annual membership meeting in New York.



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New Export Company Formed

Bob Chadderdon and Earl Stone have formed a new company dealing directly with foreign operations. Offices of the new company, INTERNATIONAL TOOL AND SUPPLY COMPANY, INC., are located at 620 Fifth Avenue, Room 318, New York 20, New York.

The new company represents several of the leading oilfield manufacturers whose products pertain to all phases of the oil industry.

Bob Chadderdon, president, and Earl Stone, vice president, both attended the University of Oklahoma and worked extensively in oilfields of Oklahoma, Texas, Louisiana and the Rocky Mountain area before coming to New York.

D. R. Langstaff, well known oil leasing agent, passed away on December 15th at his home of a heart attack. Mr. Langstaff had been ill for two months before death came.

Ralph M. Willits has been promoted to the position of mechanical engineer at the Torrance refinery of General Petroleum Corporation, it was announced by C. M. Reading, engineering department manager.

Willits, who joined General Petroleum in 1946, was a job engineer at the refinery prior to his promotion.

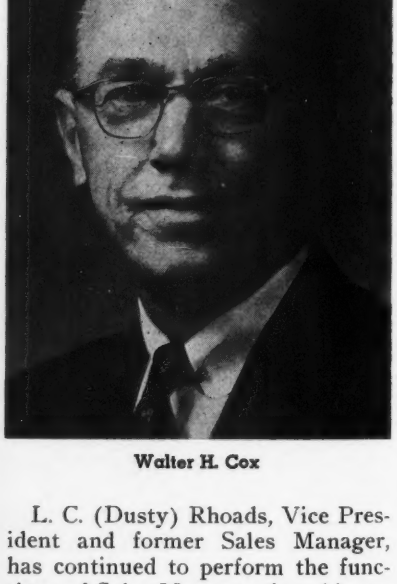
A native son of Santa Barbara, he was graduated from the California Institute of Technology with a B. S. in mechanical engineering.

Ole Berg, for many years a resident of South Pasadena and a former vice president of Union Oil Company of California, spent the holidays in Southern California. Union Oil's Art Stewart gave a stag luncheon for Ole at the California Club during his Los Angeles stay. Berg is now chairman of the board of a Canadian oil company and divides his time between Toronto and Chicago.

A two-week course in interpretation and analysis of resistivity and radioactivity logging has been offered to ten men of the Sales Department of Welex, Inc. The course was held in the Welex Research and Development Laboratory in Houston. The class which was conducted by R. B. Smith, was presented as a means of providing the salesmen with all necessary information concerning techniques and systems of logging. Those who completed the course are (left to right in the photograph above): Denzel Williamson, sales engineer, Pauls Valley; L. B. Putman, sales manager, Midland; B. R. Redwine, vice president, Welex of Canada, Ltd., Calgary; W. V. Holcomb, engineering trainee, Odessa; A. N. Taylor, sales engineer, Pampa; D. L. Bliss, sales engineer, Hobbs; W. L. Porter, sales manager, Panhandle-North Texas Division, Dallas; R. B. Smith, instructor; F. D. Sawyer, assistant sales manager, Fort Worth; L. M. Wood, sales engineer, Abilene; and B. L. Hays, district manager, Farmington.

Cox Advances At Hercules

Walter H. Cox has been advanced to Sales Manager of Hercules Tool Company effective January 1, 1958. Cox joined Hercules Tool Company in November 1955 as City Salesman, calling on the oil and supply company offices in Tulsa, Oklahoma City, and Bartlesville. Since late in 1956 he has worked as a Special Representative on various assignments in addition to City Sales. Prior to joining Hercules Tool Company, he was with Oil Well Supply Company for 18 years, later with Kerotest Valve Company, then L. C. Moore Company in Pittsburgh. He has had wide experience in oil field equipment sales.



Walter H. Cox

L. C. (Dusty) Rhoads, Vice President and former Sales Manager, has continued to perform the functions of Sales Manager since his appointment to Vice President two years ago. Mr. Cox's promotion will enable Mr. Rhoads to devote more of his time to the supervision of product design and development, manufacturing, and other duties of general management rather than sales exclusively.

James D. Divelbiss, Fort Worth, Texas, consultant, has joined Tidewater Oil Company as district geophysicist in the Casper area of Wyoming.

Field Development

Pacific Coast and "4 Corners"

Harrison Producing Joins Western Group

Harrison Producing Company of San Francisco and Texas has been elected to membership in the Western Oil and Gas Association. Harrison currently is identified with an interesting exploratory play in Apache County, Arizona, in which interest is also held by Fred Blair Townsend.

Standard Pulls Out Of Washington Project

Standard Oil Company of California has pulled out of its 8400-foot exploratory well in the Rattlesnake Hills in Benton County, Washington. It took no less than six months to drill the well, which evidently showed nothing commercial, and cost a total of $625,000 and this figure did not include primary geologic operations and lease work. The well was on a spread of 100,000 acres and was the latest of three tests undertaken by Standard to run across oil or gas in eastern Washington and Oregon. Lady Luck was looking elsewhere when the three ventures explored.

Comb Wash Wildcat Independent Venture

Three operating organizations in the independent category are reported sponsors of the 7000-foot wildcat project, just set in motion on Section 6-38s-21e in the Comb Wash area, San Juan County, Utah. Located west of the lively Aneth area, the well's operator is the Mount Peale Corporation, which is headed by Elmer Strand, widely known geologist. The main targets are the Mississippian and Hermosa formations. It was indicated that for drilling the wildcat the operating interests will earn 1040 acres contributed to the play by Three States Natural Gas Company and Fehr & Lyons out of a total spread of 2080 acres.

Texas Standard Finals Gallup Well

Standard Oil Company of Texas has completed its Federal No. 1 3-19 in Arriba County New Mexico, pumping initially more than 100 barrels a day from two intervals in the Gallup zone between 6055 and 6104 feet. Location is a one-mile beeline west of the company's Federal No. 1 3-30 discovery from a zone around 6135 feet. It flowed at the rate of 120 barrels a day.

Skelly Oil Finals Canyon Largo Well

Skelly Oil Company of Tulsa has added new interest to the Canyon Largo area, Rio Arriba County, New Mexico, by completing its Jicarilla-B No. 4 on Section 32-25n-5w for an initial flow of 130 barrels a day through a 24/64-inch bean from intervals in the Hospah formation at 5911-5950, 5965-5977 and 5988-6011 feet. The company some weeks ago completed its Jicarilla-B No. 3 on Section 5-24n-5w as a new pool discovery for 158 barrels a day through a three-quarter-inch orifice from the interval of 5858-5952 feet in the Hospah. In San Juan County, New Mexico, two new wells are on production for Skelly closer to the Four Corners. Navajo-F No. 1 on Section 12-26n-12w started off at the daily rate of 115 barrels of clean oil from the Gallup zone. Lockhart No. 2 on Section 31-25n-10w in the Bisti area came in from the Gallup for 3,000,000 cubic feet of gas a day.

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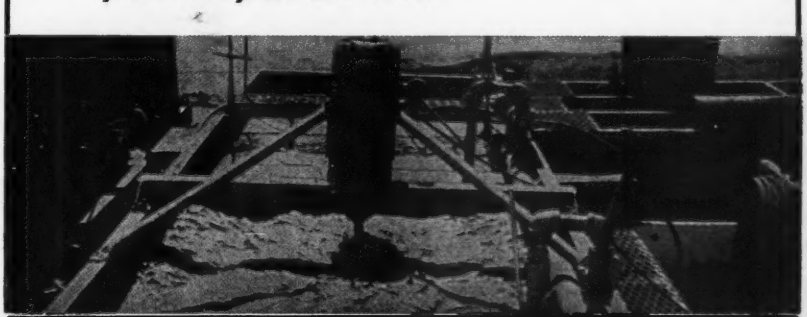

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Farmington Wildcat Scores New Discovery

Monsanto Chemical Company's Veirson No. 1 wildcat test, four miles north of Farmington in New Mexico, has been shut in after completion in the Graneros-Dakota zone at 5974-6070 feet. The well performed commercially, but accurate production evaluation is yet to come.

Carter Glade Unit Wildcat Showing Gas

Although 45 miles or so northeast of Aneth field production in Utah, Carter Oil Company's Glade Unit No. 1 wildcat in Dolores County, Colorado, has given operators at the Four Corners something new to talk about. The well, which lies 53 miles north and west of late gas discoveries scored by General Petroleum Corporation, flowed gas at a rate better than 8,000,000 cubic feet a day from the Hermosa interval from approximately 5786 to 5907 feet.

Fish Creek Wildcat Digs

On a farmout from British American Oil Company, Edward J. Kubat has set in motion a scheduled 3500-foot wildcat test on Section 23-27s-19e, north and west of Fish Creek in San Juan County, Utah. Target is production in the Paradox formation.

Otero Field Spreads Out

Pan American Petroleum Corporation has completed the third well in the Otero field which was opened the other month. The new well, Jicarilla No. 9 on Section 10-25n-5w in Rio Arriba County, started off at the daily rate of 211 net barrels of oil through a half-inch orifice from the Graneros zone at 7355-7402 feet.

Occidental Enters San Juan Basin Land

Occidental Petroleum Corporation of Los Angeles which owns substantial production in California fields, particularly in Fresno County, has assembled no less than 27,000 acres in the San Juan Basin in keeping with a farmout arrangement with Northwest Production Corporation of Albuquerque. Some of the land lies in New Mexico, but according to reports the majority of the acreage in the deal lies in La Plata County, Colorado. Official information from Los Angeles headquarters to date has been more or less sketchy. However, it appears that Occidental will gain 21,500 acres in the area by putting out $115,000 for exploration and consequential development on this ground within two and one-half years. Occidental is also called upon to drill a Picture Cliff test approximately five miles northeast of Ignacio townsite within a half-year. Northwest Production in the Colorado farmout will hold on to the odd numbered sections and a two and one-half per cent royalty on land made over to Occidental. Occidental, it is understood, will acquire all of Section 6 and 8-26n-5w in Rio Arriba County, New Mexico. In addition a test well is to commence by March and by this action Occidental will be the recipient of the west half of Section 4, 9, 16, 21, 22 and 27-26n-3w, with a brace of Mesaverde projects on the calendar for May 15 and September 1, respectively. From what has been learned, terms of the agreement provide for steady drill-

ing, or in other words a well every six months on each of the two blocks in New Mexico. Northwest Production will control a one-eighth overriding royalty, which upon payout will be changed to a 40 per cent working interest. Dave Harris, long identified with Southland finance, is Occidental executive.

Oil Drilling In Kaibab Forest Sought

Operators, who have filed applications to explore for oil on a portion of the Kaibab National Forest in Arizona, are meeting with some opposition from certain groups. The part of the Kaibab Forest, where oil leases are sought, has been administered as a wildlife refuge by the U.S. Forest and Arizona State Game Department since 1906. Many geologist agree that oil formations proved in the Navajo Reservation stretch into the Kaibab, which lies immediately south of the Utah State line in Coconino County.

Indian Bureau Decision Changed

Clearing the air somewhat, the Interior Department has made known that the Indian Bureau will not hold up deposits, bonuses, royalties or rentals for leases of Navajo Indian Tribal Lands in San Juan County, Utah, which are awaiting exact definition of title to these acres. This action is contrariwise to a Bureau policy formulated last December 5 previous to opening of bids on oil and gas leases on tracts of Indian lands on the Navajo Reservation.

Pure Oil May Mix Crude Output

There is some talk that Pure Oil Company is considering the mixing of crude oil produced in the Big Flat field with that put out in the Aneth field and making an offer to the Four Corners Pipeline Company for carrying the crude over the pipeline from the Four Corners to Los Angeles.

Conoco Well Looking Good

On drill stem test covering the interval of 5476-5563 feet, Continental Oil Company recovered 45 barrels an hour with its Navajo-A No. 15 in the White Mesa field in San Juan County, Utah. On trial was the Aneth zone in the Paradox formation.

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Plieto Wells Make Progress

One mile southwest of the Pleito Creek field, Shell Oil Company is drilling a couple of thousand feet down with KCL No. 31X-3 on Section 3-10n-21w in the billowing Pleito Hills. Getting ready to spud, meantime, is KCL No. 27-25 extension test on Section 25-11n-21w on the Pleito Ranch and one mile northeast of the Pleito Creek field. Approximately 11,000 feet is expected to reveal the whole story for both wells.

Bena Station Wildcat Digs

Four miles northeast of the Edison field at Bena Station, Wilson Oil Company as operator, is drilling at 1300 feet with Wilson No. 1 wildcat well on Section 11-30s-30e. Records indicated that nine years ago, Hillview Oil Company drilled its El Tejon No. 1-A nearby and quit at 2670 feet with nothing to justify going deeper. Wilson Oil Company maintains headquarters in Huntington Beach.

Colusa County Test Interesting

Humble Oil & Refining Company, the largest producer of crude oil in the world, is making hole near objective level of 3000 feet with its Hamilton Bend Gas Unit 1 No. 2 extension test on Section 19-17n-1w at Compton Land in Colusa County. This well qualifies as the first offset and is south of the Honolulu-Humble Jane F. Carter Unit 1 No. 1, which on last Christmas Eve was completed as a Hamilton Bend discovery, flowing 12,350 cubic feet of gas a day through a 19/64-inch choke from a total depth of an even 3000 feet.

John Wayne Adds Kern Front Producer

Top-Flight Motion Picture Star John Wayne has completed another well at Kern Front. His Snow-GP No. 3 got the concluding tap at 2010 feet on the pump for 43 barrels of 13.5 gravity oil a day, with a primary cut of about 30 per cent.

Pyramid Hills Wildcat Spudded

Amerada Petroleum Corporation's CWOD No. 1, a stratigraphic test on Section 23-24s-18e at the Pyramid Hills in Kings County, has been spudded in and is drilling on down. The derrick stands three miles east of Pyramid Hills producing wells.

West Bellevue Well Bows Out

Verde Enterprises as operator for the Marisposa Company has abandoned Kilewer No. 11-33 on Section 33-29s-26e in the West Bellevue sector of Kern County. The well was drilled to a total depth of 8000 feet and plugged back to 5760 feet for final tests.

Los Lobos Test Production Failure

Drilled to a deep 12,500 feet without visible encouragement, Shell Oil's KCL No. 16X-26 wildcat on Section 26-11n-22w at East Los Lobos in Kern County has gone the way of all dusters.

Tejon Flats Well Moving

Porter Sesnon et al is making hole not far above target depth of some 8000 feet with Sesnon-Reserve No. 83-14 wildcat on Section 14-11n-19w in the Tejon Flats area. Hopes are held that a sand which showed much of interest when penetrated four years ago by another operator will be inclined to produce at this location. The drill site is about one-third mile northeast of Julio V. Dougherty & Associates' No. 63-14, which was written off four years ago after attempts to shut off water were of no avail. The Dougherty project, if history is correct, recovered 1300 feet of gassy oil on a test at 8395-8411 feet, together with about 1000 feet of muddy water. The Sesnon job lies one and one-half miles northwest of the six-barrel daily well in the Tejon Flats field.

Cayetano Test Set By Standard

Standard Oil Company will shortly be drilling its H. W. Arundell No. 1 wildcat test on Section 8-4n-19w or three miles northeast of the Fillmore field in Ventura County.

Carrizo Plains Adds Abandonment

On a farmout from Humble Oil & Refining Company, R. K. Cross has abandoned Humble-Grayson-Owen No. 68-19 wildcat on Section 19-31s-19e in San Luis Obispo County and northwest of Cuyama. The drill site was about three miles of two dusters drilled months ago Claude Arnold No. 2 to 4485 feet, by Humble. The company took and Arnold No. 1 to 5553 feet. The general terrain has been the scene of close to 80 unsuccessful wildcat wells, where exploratory drilling was greatly stimulated following discovery of Cuyama Valley.

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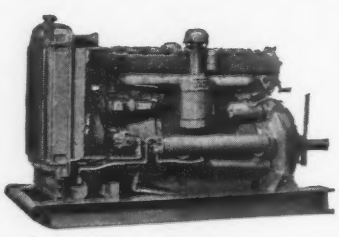

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Canal Field Set For Water Flooding

The Canal field in Kern County has been marked out for pilot water flooding as a means of boosting recovery of oil from the Upper Stevens sand zone. Injected water will find its way to the Upper Stevens through Ohio Oil Company's KCL No. E-19 well on Section 13-30s-25e. The target zone is down about 8100 feet. Shell is a partner in the flood project, with Ohio the actual operator.

San Ardo Test Gone Off Board

On ground not many miles west of the San Ardo field, The Texas Company's Aurignac (NCT-1) No. 30 on Section 33-22s-10e found nothing to 4018 feet and was given up as a duster.

Dutch Oil Stakes Tapia Canyon Test

Dutch Oil Company has staked location for Howell No. 1 wildcat on Section 30-5n-16w in the Tapia Canyon area of Los Angeles County. Location is three-quarters of a mile northeast of Tapia Canyon field production. The field has registered an abandonment which is exemplified by The Texas Company's Honor Ranch B (NCT-2) No. 1 on Section 25-5n-17w. The duster was carried to 795 feet and was given up at that depth after fish was recovered and electric log run.

Rocky Mountain NEWS

Colorado—Idaho—Montana—New Mexico—Utah—Wyoming—Western Canada

Colorado

Continental Oil has found production in the Muddy in the North McCallum area of Jackson County with the successful completion of the No. 1 Sherman-B, ne nw se 13-9n-79w. The field extension pumped at the rate of 47 barrels of oil per day through perforations at 6184-6214 feet. The pay zone was topped at 6158 feet. This is the first Muddy production in the field, where the Dakota and Morrison also are productive.

Tennessee Gas Transmission has installed pump at the No. 1 Federal-James, ne ne ne 25-6n-86w, Routt County. Operator swabbed 235 barrels of oil per day from the Niobrara shale. The production was obtained from open hole at the interval 4094-4800 feet. Several drill stem tests were previously taken, and on one of these, at 4464-91 feet, the recovery was 3800 feet of oil and 60 feet of oil and gas cut mud.

First commercial production in Dolores County has been obtained by Carter Oil Co. at the No. 1 Glade Unit, c ne sw 11-41n-17w, which yielded gas at the rate of 8,170,000 cubic feet per day from the interval 5785-5905 feet. At last report, operator was running pipe.

Jett Petroleum Co. has announced a schedule of 11 wildcats to be drilled in six southeastern counties on farmouts from major operators. They will test the Mississippian and will be drilled in Pueblo, Baca, Otero, Kowa, Bent and Prowers Counties.

There was considerable drilling activity by other operators in the southeastern part of the state as the year drew to a close. Shell Oil Co. spotted a Mississippian venture at the No. 1 Federal Land Bank, c se ne 31-34s-44w, scheduled for 5400 feet. This same operator is drilling a similar test at the No. 1 Mayberry, c sw ne 8-34s-41w. Amerada Petroleum is drilling the No. 1 Pride Unit, nw nw se 23-33s-42w, also a Mississippian test. Kerr-McGee Oil Industries will test the Mississippian at the No. 1 Nation, sw sw ne 15-28s-43w, which is currently drilling.

In Logan County, Skelly Oil found gas production at the No. 1 Osborn, c se ne 2-10n-55w. The flow on a drillstem test opposite the J sand was at the rate of 7,800,000 cubic feet per day.

El Paso Natural Gas recovered a flow of gas at the rate of 4,200,000 cubic feet per day a tthe No. 1 Nichols-Govt., c sw ne 14-7s-99w. This is a shallow producer, with production from Wasatch perforations at 914-926 and 854-878 feet.

Utah

Continental Oil Co. is drilling an offset to the Cahone Mesa discovery in the Aneth area of San Juan County. Continental has scheduled the No. 6 Navajo, sw ne sw 21-40s-25e, as a Paradox venture at about 6100 feet. It is spotted in the northern part of the field and offsets the No. 1 Navajo-H, c sw se 21-40s-25e. General Petroleum is producing the No. F-14-16 Navajo, c sw sw 16-40s-25e, which is the farthest north well in the field.

Carter Oil is preparing to drill two San Juan County wildcats. One of these is the No. 1 Navajo-107, in 11-42s-24e, south of the White Mesa field, and the other, the No. 5 Bluff Bench Unit, in 17-40s-22e, in the Turner Bluff area.

Gulf Oil is drilling ahead at the No. 1 Gulf-Aztec-Lockhart-Federal, w½ sw 22-28s-20e, San Juan County. No shows have been reported.

In Uintah County, Sun Oil drilled a failure at the No. 3 Ute Trail Unit, c nw se 19-9s-20e. There were some gas shows on drillstem tests. The well was drilled to 6558 feet total depth.

Standard Oil of California has found additional oil and gas shows on a drillstem test of the No. 2 White River Unit, n½ se se 10-8s-22e, Uintah County.

Renwar Oil abandoned its Turner Bluff area wildcat in San Juan County, the No. 1 Federal, c ne se 13-40s-22e. The failure was drilled to 5865 feet total depth. There were some shows on drillstem tests.

New Mexico

Standard Oil Co. of Texas has plugged back to 1810 feet in the Hermosa at the No. 1-6 Navajo-Ute, nw se sw 3-31n-16w, San Juan County, and is preparing to sandfrac. The well was drilled to 9037 feet total depth in the Elbert.

Pan American Petroleum is drilling ahead toward its Mississippian objective after finding oil and gas in the Paradox at its Hogback field development well, the No. 17 Govt.-19, sw ne se 19-29n-16w, San Juan County. A drillstem test at 6520-6670 feet recovered a flow of 14 barrels of oil per hour and gas at the rate of 5,011,000 cubic feet per day.

The Texas Co. has abandoned its Devonian test at the No. 1 Navajo-N, c sw nw 17-32n-18w, San Juan County,after recovering salt water. The wildcat was drilled to 7851 feet total depth. Two other failures in the county were Davis Oil's No. 1 Conoco-Navajo, c sw sw 11-26n-17w, at 4838 feet total depth, and El Paso Natural Gas Products' No. 1 Hanson-A, s½ ne ne 5-25n-102, at total depth of 5755 feet.

Lion Oil recovered gas at the rate of over 5,000,000 cubic feet per day at the No. 1 Viersen, c ne ne 19-20n-13w, an Juan County. Tests are continuing.

Skelly Oil, which found good oil shows both in the Gallup and Dakota, will attempt to complete the No. 1 Davis from both zones. It is located in sw ne ne 26-26n-11w, San Juan County.

Nebraska

Brack Drilling Co. has installed pump at its Lansing-Kansas City discovery in Hitchcock County. The wildcat, the No. 1 Hudson, c ne ne 1-1n-34w, bailed five barrels of oil per hour

on test from perforations at 4082-88 feet. The well was drilled to 4815 feet total depth, with pipe set to 4150 feet. The operator has staked location for two other wells in a scheduled three-well series. J. M. Huber Corp., Gulf Oil and Seaboard Oil are associated in the venture. The wildcat program will be completed before a development program is undertaken on the 20,000-acre block. The Lansing-Kansas City is a Pennsylvanian member which has seen some successful activity in Dundy County to the west.

In Kimball County, Petroleum, Inc., abandoned the No. 1 Young B, c ne ne 7-15n-55w at 6510 feet total depth.

Drilling an offset to Chandler & Simpson's J sand discovery at the No. 1 Skiles, Lewis Brothers and Stuarco Oil have a producer at the No. 1 Robertson, ne ne nw 34-16n-55w, Kimball County. The confirmation swabbed 32 barrels of oil in a 17-hour test. The recovery was made from perforations at 6166-72 feet, and the well was drilled to 6235 feet total depth.

Recent failures include British-American Oil Producing's No. 1 Frostrom, c ne se 10-17n-53w, Banner County, at 5656 feet total depth. Also dry and abandoned were Eddie Fisher and Inland Drilling's No. 1 Edens, c sw sw 5-18n-56w, at 6403 feet total depth, and H. L. M. Drilling's No. 1-16 State 696, c sw nw 16-14n-52w, at total depth of 5513 feet.

North Dakota

Hunt Oil Co. was high bidder at a sale of state lands held in December, paying $44 per acre for a tract of 240 acres in McKenzie County. Two hundred eighty three tracts, for a total of 84,774 acres, were sold at the sale, bringing a total of $441,541.63. Second highest bidders were Carter Oil Co. and Cities Service Oil Co., each of which paid $20.50 per acre for separate tracts. Prices at the sale varied widely, some lands going for 25 cents per acre and others covering almost every intermediate figure between the minimum and the second high of $20.50. The total bonus averaged out at $5.20 per acre.

A northwestern extension attempt for the Rocky Ridge field in Billings County has given some evidence of probable success after failure of attempted offsets to the southeast and northeast. Northern Pump has found shows in a core at the No. 3 Fritz, c se nw 15-137n-100w. These shows were found in the Heath at 8080-8114 feet. Operator is preparing to test. There are only two producing wells in the field thus far—the discovery and its confirmation, which also was drilled to the northwest.

Amerada Petroleum Corp. has shut in its No. 1 Kennedy, c nw ne 29-151n-96w, McKenzie County, after finding oil and considerable salt water in the Madison. Several drillstem tests were taken below 9059 feet. In a test at 9238-98 feet, the well flowed 36.5 barrels of 44 gravity oil. Recovery also included 644 feet of sulphurous oil and gas cut mud and 100 feet of sulphurous salt water. Operator perforated at 9467-88 feet, acidized and reacidized, swabbing salt water. Operator then perforated at 9318-56 feet and acidized, swabbing five barrels of oil and seven barrels of salt water in seven and one half hours. After reacidizing, 17 barrels of salt water, one barrel of oil and basic sediment were swabbed in eight hours. Perforated again at 9244-74 feet and after acidizing, the well flowed 80 barrels of load oil in five hours through various chokes.

In Burke County, Petroleum Corp. of America and Tom Jordan Jr. swabbed two barrels of oil per hour from the No. 1 Anderson, c nw se 29-163n-90w, through perforations opposite the Nesson at 5771-78 feet. Swab tests are continuing at this well, which is a confirmation of the No. 1 Nygaard, se se ne 29-163n-90w.

Hunt Oil Co. found salt water in the Mission Canyon at the No. 1 Rosenau, c se se 17-159n-79w, McHenry County, and abandoned the wildcat.

Montana

Production in the Outlook field of Sheridan County has been extended westward with two wells by Amerada Petroleum Corp. The operator recovered 900 feet of oil on a drillstem test at the No. 1 Wexels, ne ne 23-36n-52e, which is a mile west of previous production in the field. The test was taken at 9090-9105 feet. Two miles to the west of this well, Amerada recovered oil at the rate of 336 barrels per day in a test of the No. 1 Thorson, sw se 21-36n-52e. The test was taken at 8855-8904 feet.

Carter Oil has abandoned a northern Sheridan County venture. Carter drilled to 10,215 feet total depth at the No. 1 Nelson, s½ ne nw 4-37n-53e.

In Teton County, Sinclair Oil & Gas abandoned the No. 1 Gitchel, c nw nw 9-27n-6w. After being drilled into the Devonian at 5100 feet, the well was plugged back to the Madison, with test of that zone also unsuccessful.

Lawrence Barker Jr. and Vernon Taylor Jr. found Amsden production at the No. 1 Botts, sw ne 3-6n-32e, Yellowstone County. The rate of flow through 3/16 inch choke was 67 barrels of oil per day through perforations at 6182-6190 feet and after acidizing.

Carter Oil and Mobil Producing are drilling ahead to their Lakota objective at the No. 1 Wheatley-Govt., sw nw nw 7-9s-22e, Carbon County. A drillstem test of the Frontier at 8649-90 feet yielded gas at the rate of 1,160,000 cubic feet per day. Pipe recovery included 530 feet of gas and distillate cut mud and 100 feet of distillate.

Mobil Producing has abandoned the No. F-44-34-P, se se 34-16n-57e, Dawson County, at 10,809 feet in the Red River. Some shows were found in tests and cores but were not commercial. A drillstem test at 10,716-736 feet recovered 90 feet of slightly oil cut mud and 446 feet of slightly oil and gas cut watery mud.

Mobil Producing is drilling another Red River test at the No. F-13-18-G Govt., ne nw sw 18-8s-58e, Carter County. Scheduled to go to 4500 feet, it is located in the Willow Creek Anticline area.

Thirty-three tracts of Montana state lands, totaling 17,082 acres, were leased at a recent sale for a total bonus of $24,460. Highest price was offered by L. J. Mulholland, who paid $11 per acre for 320 acres south of the Outlook field in Sheridan County. Most prices were considerably lower, 15 of the parcels going to Pan American Petroleum for a bonus of $1 per acre.

Wyoming

Caulkins Oil is drilling ahead toward the Morrison at its Sweetwater County wildcat, the No. 2-26 Federal, c sw nw 26-15n-104w, after finding gas shows in the Frontier. Caulkins has a shut-in gas well four miles to the northwest of this wildcat.

Shell Oil, drilling a Morrison venture in Natrona County at the No. 23-20 Govt., ne sw 20-32n-82w, is testing.

Over four miles west of the Grieve field in Natrona County, Forest Oil, Mohawk Petroleum and Monterey Oil are drilling the No. 14-1 Govt., sw nw nw 14-32n-86w. The Grieve field is one of the active newer areas of the state, with Forest Oil as the operator.

Phillips Petroleum has dually completed its Rolff Lake confirmation in Fremont County after finding oil production in both the Curtis and Phosphoria, which also were productive in the discovery. The confirmation is the No. 1-A Tribal, se sw 26-6n-3w. Based on a five-hour test, the rate of flow was approximately 345 barrels of oil per day from the Curtis through 2½-inch tubing. Production in a test of the Phosphoria was 92 barrels per day through 9/64-inch choke.

After drilling into the Curtis at 4078 feet total depth, J. G. Dyer has abandoned the No. 1 Govt., sw sw sw 10-44n-97w, Hot Springs County. No shows were reported.

In Albany County, Tennessee Gas Transmission abandoned the No. 2 Baillie, w½ se ne 33-17n-75w, in the Sundance at total depth of 2217 feet.

Richfield Oil is drilling a Sundance test, the No. 1 Travis, in Fremont County. Objective is expected at 7890 feet. The wildcat is located in the Dutton Basin area and is w½ nw nw 31-34n-90w. It is southeast of a Tensleep failure drilled eight years ago.

Trigood Oil is completing its highly interesting Sheridan County wildcat, the No. 1 Ingram-A, n½ ne se 9-54n-77w. This well has held considerable attention because of reports that 4600 feet of oil was recovered from the Minnelusa, but the operator has not confirmed this find. Trigood has set production string and perforated opposite the Minnelusa.

Failure to recover oil in commercial quantity on pump, has led D & D Drilling Co. to abandon the No. 1 Leiter, c ne sw 21-52n-77w, Johnson County. The oil that was recovered came from the Teapot and Parkman formations.

Tidewater Sponsors Supervisory Training

Tidewater Oil Company is engaged in a company-wide supervisory training program titled "Effective Supervision." The program was prepared under the direction of H. G. Fillhower, manager of the company's non-divisional employe relations department, headquartered in San Francisco.

Refinery Will Be Dismantled

The Texas Company will begin dismantling its 8000-barrel refinery at Sunburst, Montana, when its new plant at Anacortes, Washington, goes on stream early in 1959.

Gosford Well Drilling Ahead

Universal Consolidated Oil Company is drilling below several thousand feet with its fourth well in the Gosford area in Kern County. The well, Statex-KCL No. 21-19 on Section 19-30s-27e, similar to its predecessors is headed for the Lower Stevens sand zone. The company gave the final touch to the first three wells for a current yield of 732 barrels of 31 to 34 gravity oil a day. The third well, States-KCL No. 12-19, at last reports was flowing through a 12/64-inch bean at the daily rate of 280 barrels of oil a day, cutting about eight per cent, along with 166,000 cubic feet of gas a day. A southwest offset job to Universal's discovery well is being drilled by Getty Oil Company on Section 24-30s-26e.

King Oil Will Wildcat Wilmington

King Oil Company of 4252 Beverly boulevard, Los Angeles, will drill King No. 1 wildcat on Section 6-5s-13w or one mile southwest of Wilmington production. The project, which will be drilled to target depth of 4500 feet under contract with Atlantic Oil Company is on a spread of more than 210 leased acres. King Oil, which maintains headquarters at Wichita Falls, Texas, also holds 260 acres of town-lot leases in a district bounded by Melrose avenue, north; Third street, south, Hobart boulevard, west and Alexandria avenue, east, in the Los Angeles residential area.

Ohio Oil Drills Kings County Test

Ohio Oil Company is on the way to target depth of 8400 feet in the Cretaceous with its Frank D. Toste No. 1 wildcat venture on Section 10-18s-20e in the Hub area in Kings County. Location is about five miles southeast of Riverdale across the line in Fresno County, where the Miocene and Eocene formations are open to production.

The new president of the Desk and Derrick Club in Albuquerque, New Mexico, is Miss Lois Bird of Pan American Petroleum Corporation. She succeeded Mrs. Goldie Collins. Miss Edith Boehlert of Lion Oil Company is the new vice president for the ensuing year, Miss Mary Lee Jacobsen of Pan American, secretary; and Mrs. Vera Radcliffe of Petro-Atlas Company, treasurer.

Gas Company Plans Farmington Building

Southern Union Gas Company plans to start construction shortly a new office building at Kutz Canyon in the Farmington district of New Mexico. The new structure will be of frame and stucco design and provide some 2360 square feet of floor space.

Shell Will Build Farmington Offices

Shell Oil Company will put up a $500,000 division headquarters building in Farmington, New Mexico. Work on the 30,000-square-foot structure will begin immediately and the two-story building is expected to be completed by August, 1958. It will house the company's exploration, production and pipeline staffs.

Hermosa Offshore Drilling Scheduled

Involving a bonus of $11,100,000, the largest ever paid for the right of developing tideland oil, Shell and Continental have achieved the privilege of drilling for oil offshore Hermosa Beach and the use of the city property tract as headquarters for operations. The two companies outbid three other oil groups last April when the Hermosa Beach governing body asked for oil development proposals. All of the forthcoming drilling will be conducted in the billowing sea from four drilling platforms, constructed by the oil firms. Three will be situated at least one mile from shore and another near the three-quarter-mile point. Shell-Conoco have already presented the Hermosa Beach City Council with a $500,000 check. Balance of the bonus bill will be paid if the beach city's voters approve an oil drilling ordinance at a special election February 25, 1958.

Calcor Moves To Larger Plant

Andy F. Brown, president and general manager of Calcor Corporation, announced recently that the company is celebrating its 62nd year of progress by moving the steel building division into a new larger home in Huntington Park, California.

Calcor Corporation was established as the California Cornice Works in 1896 by Christian Specht of Omaha, Nebraska, as an individual sheet metal business. In 1900 Specht joined with his son, Joseph, in a partnership. The business continued to expand and in 1904 was incorporated. With the change from cornice work to other operations, the name was changed in 1953 to Calcor Corporation.

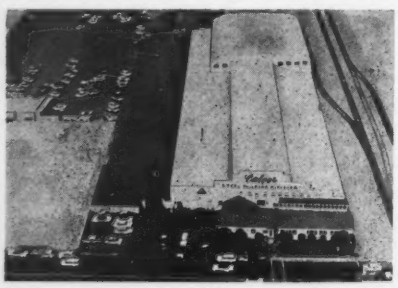
Calcor is the largest company in the world to specialize in the construction and erection of steel service stations, garages, auto laundries, cafes and other commercial buildings.

"The new plant," said Bernard Perlin, general manager of the steel building division, "was formerly occupied by Westinghouse, and has been extensively remodeled for semi-automation to provide utmost efficiency in steel building fabrication. Raw materials enter one end of the plant by railroad spur and truck, and are processed swiftly and efficiently through all fabrication steps, arriving at the other end of the plant ready for delivery and erection. Calcor's own large fleet of flat bed and modern erection trucks carries fabricated sections to a building site as soon as completed. Within hours after delivery the frame of the new building is in place, anchored to concrete piers."

With these new facilities Calcor will be able to complete twenty new stations a week and place them into operation 30 to 60 days sooner than other types of construction.

30 All-New Designs Announced

"Keeping up with the latest architectural trends and improvements, Calcor has re-designed its full line of steel buildings and offers 30 all-new designs and basic plans," stated James W. Baker, sales-manager of the steel building division. "They feature the new long, low silhouettes and have full length roof decks with rear gutters. More sign area is available with these new designs, as well as handsome rear walls that have a shadow frame look."



Calcor has its own design staff who works with all of the major oil companies, advising them on the latest trends in light-weight steel fabrication. Although each station differs in size and shape to some degree, most oil companies maintain a basic architectural style for their outlets. Calcor's designs and plans allow for individually styled exterior architecture to meet this demand.

"As the market place for petroleum products, the service station must reach out and welcome the passing motorist," continued Jim Baker. "Its magnetic power comes from its clean, airy, high-canopy appearance and its wide-sweep driveways."

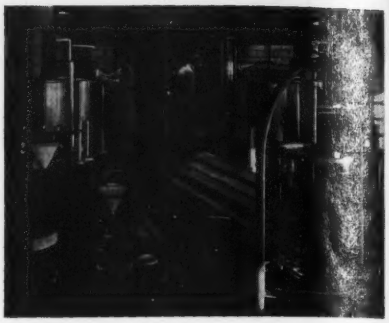
"Some stations have a tendency to become 'comfortable old shoes' around a business community—well-known to long-time steady customers, but just a blur in the scenery to the important new customers. A new or remodeled station makes everyone aware of its presence as a progressive station, and its clean, modern lines boost sales immediately."

Kern Bluff Test Quits

Henry S. Hendler has abandoned Titus No. 6 test on Section 18-29s-29e in the Kern Bluff area of Kern County at 845 feet. Location was on a 40-acre lease, which contains three producing wells and now just as many dusters.

Old Buttonwillow Test Moving Ahead

In the old Buttonwillow gas field, The Texas Company's Texas-Standard-Stutsman Community No. 1 wildcat on Section 6-28s-23e is drilling ahead toward objective depth of 13,000 feet. A Stockdale test, just under way on Section 9-30s-27e and known as KCL-Stockdale No. 1, is going even deeper to somewhere around 13,500 for a look at the Stevens sand zone, productive at Gosford, two and one-half miles southwesterly.



New Hazardous Materials Laboratory is now in operation at Mixing Equipment Company, Rochester, New York. Purpose of the new facility is to help the petroleum industry solve basic problems of mixing, blending and separating with solvents and other Class I, Group D materials, says research director Dr. James Oldshue. Featured in the lab is a new Mixco multi-stage contractor (right, rear) which can be converted from 8 to 32 stages as needed for different runs. Six 100-gallon tanks (right and left, rear) serve as feed tanks or receivers to allow 600-gallon capacity processing simultaneously. The new facility also will be used to supply answers to specific customer problems of suspension of solids, leaching and solvent extraction as well as "blue-sky" research, say company officials.

Riverdale Well Drilling Slated

Ferguson & Bosworth are ready to drill Kalpure-Sunset No. 1 well on Section 9-17s-19e, along the north edge of the Riverdale field in Fresno County. The project shapes up as a joint effort with Kalpure Oil Company, situated on a farmout from Sunset International Petroleum Corporation. Sunset is understood to hold a 50 per cent interest, with the balance shared alike by Kalpure and Ferguson & Bosworth, with the latter acting as operator. The well offsets Amerada Petroleum's well which was completed in 1946, which after several weeks flattened out after accounting for a total yield of 85,000 barrels of crude oil. Green & Dreblow as contractor will handle the drilling.

Arroyo Grande Field Well In

Signal Oil & Gas Company's Signal-Rock No. 67 well on Section 31-31s-13e in the Arroyo Grande field in San Luis Obispo County is in from 1105 feet for 555 barrels of 14.8 gravity oil a day, cutting initially 12 per cent.

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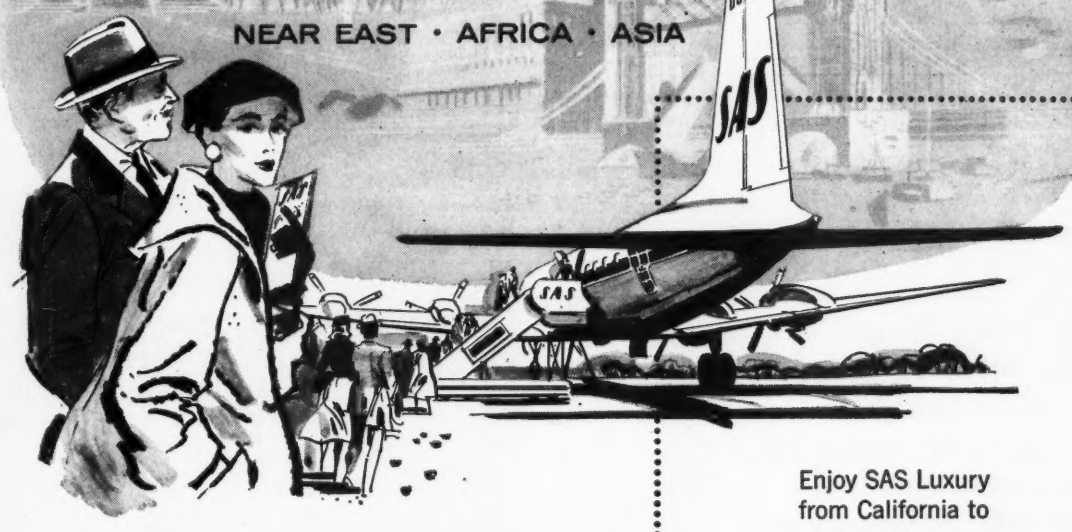

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Said the hesitant young sheik upon inheriting his father's harem:

"It's not that I don't know what to do; I just don't know where to begin."

The old timer has yet to come up with the answer to his question as to how mothers ever learned all the things they warn their daughters not to do.

The inconsistency of women comes out in the one who screams and goes chair climbing upon seeing a mouse and then snuggles herself into a convertible beside a wolf.

The bride and groom entered the elevator and its blonde operator greeted the groom with "hello darling."

When finally in their room the bride demanded, "who was that hussy?"

"Now wait," the groom pleaded, "I'm going to have enough trouble explaining to her who you are."

The Lone Ranger and Tonto came upon a band of Indians, turned and started riding for their lives. Suddenly they came upon another band of Indians and when the Lone Ranger asked "which way?" Tonto promptly said "this way" and they started for an opening in the hills.

Suddenly another band of Indians appeared in front of them, and the Lone Ranger asked "what do we do now?"

To which Tonto replied, "white man, what do you mean 'we'?"

One of the native girl teachers in a Philippine school, which had an American principal, sent along this resignation:

"I wish to resignate. My works are too many and my salaries too few. Moreover, my principal makes many lovings to me, to which I say, "Oh! Not."

Posted near the beach:

"Who picnics by these roaring waves
And all the sand with litter paves
May aches rack his lower chest
And ants invade his pants and vest."

Two sailors were comparing notes after a 24-hour pass. One reported his leave as

"Terrific, I spent the night with a woman taxi driver."

"How do you know she was a taxi driver?" his partner asked.

"Because, all night long she kept going out on calls."

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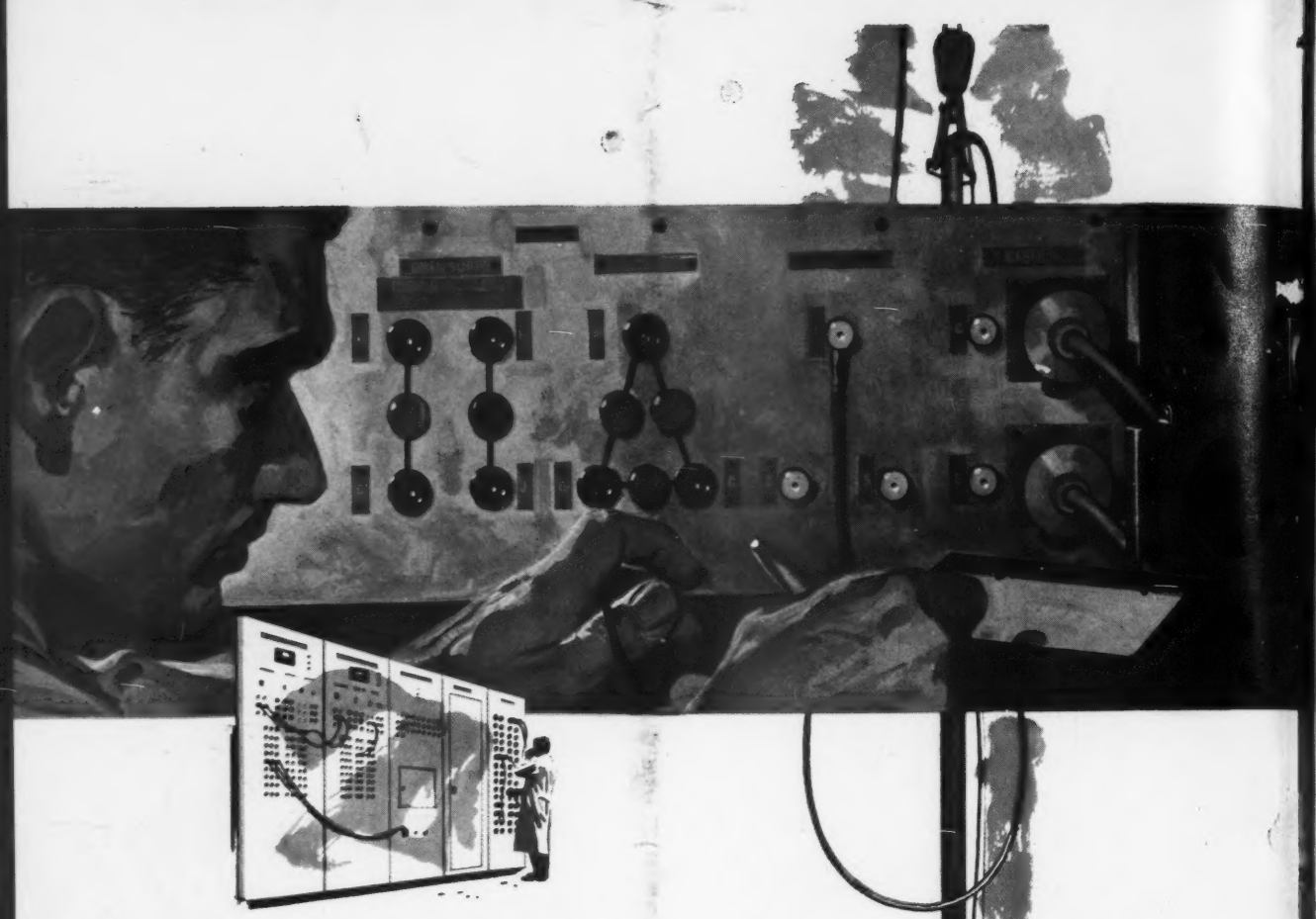

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To aid in this work, engineers at the Schlumberger plant in Houston conduct simulated field tests from their laboratory benches. Each laboratory is wired to a common test well with standard logging cable. A "flick of the switch" in a distribution center connects the logging instrument in the well with the surface recording equipment in the laboratory. This "logging through a switchboard" illustrates the progressive engineering practices utilized at Schlumberger.

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